

United States Nuclear Tests

July 1945 through September 1992



U.S. Department of Energy,
National Nuclear Security Administration Nevada Field Office

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Front cover photos

Top: *Baker* was the third nuclear test conducted by the United States at Bikini Atoll on July 24, 1946. *Baker* was detonated underwater using a Mark 3 device similar to "Fat Man" with a yield of 21 kilotons. Visible in the spout are ships subjected to the effects of the underwater detonation.

Bottom left: *Grable* was the 42nd nuclear test conducted by the United States at the Nevada National Security Site on May 25, 1953. *Grable* was an airburst detonation fired from a 280 millimeter gun using a Mark 9 projectile, with a yield of 15 kilotons.

Bottom right: An aerial view of snow-covered Yucca Flat on the Nevada National Security Site. Visible are numerous subsidence craters that sometimes form when a collapse of the cavity created by an underground nuclear detonation continues all the way to the surface (more than 50 percent of the time).



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Introduction

This document lists chronologically and alphabetically by test name *all* nuclear detonations, regardless of nuclear yield (save those used in combat), conducted by the United States from July 1945 through September 1992.

Two nuclear weapons that the United States exploded over Japan ending World War II are not listed. These detonations were not “tests” in the sense that they were conducted to prove that the weapon would work as designed (as was the first test near Alamogordo, New Mexico, on July 16, 1945), or to advance nuclear weapon design, or to determine weapons effects, or to verify weapon safety, as were the more than 1,000 tests that have taken place since June 30, 1946.

The nuclear weapon (nicknamed “Little Boy”) dropped August 6, 1945, from a U.S. Army Air Forces B-29 bomber (the *Enola Gay*) and detonated over Hiroshima, Japan, had an energy-yield equivalent to that of 15,000 tons of TNT. The nuclear weapon (nicknamed “Fat Man” and similar to the “Trinity” device) exploded on August 9, 1945, over Nagasaki, Japan, had an energy-yield equivalent to that of 21,000 tons of TNT. Both detonations were intended to end World War II as quickly as possible.

Data on U.S. tests were obtained from, and verified by, the U.S. Department of Energy’s (DOE) three weapons laboratories—Los Alamos National Laboratory (LANL), Los Alamos, New Mexico; Lawrence Livermore National Laboratory (LLNL), Livermore, California; and Sandia National Laboratories (SNL), Albuquerque, New Mexico—and the Defense Threat Reduction Agency (DTRA). Additionally, data were obtained from public announcements issued by the Atomic Energy Commission (AEC) and its successors: the Energy Research and Development Administration (ERDA), and DOE, respectively.

Caveat

The information contained in this document was gleaned from multiple sources over time. Some of the data have been updated to reflect the most recent analyses conducted by the national weapons laboratories. When discrepancies were encountered, every attempt was made to use the most acceptable or verifiable information. In some instances, multiple spellings of test names were encountered, and the most commonly used name is included in this document (e.g., *Johnnie Boy* versus *Johnie Boy*). Once a “test” has been categorized as such, no attempt has been made to change its categorization based on the current definition of a “test” found in the 1990 Protocols to the 1974 Treaty on the Limitation of Underground Nuclear Weapons Tests (also known as the Threshold Test Ban Treaty) and the

1976 Treaty on Underground Nuclear Explosions for Peaceful Purposes (also known as the Peaceful Nuclear Explosions Treaty). For example, *Huron Landing* and *Diamond Ace* were conducted simultaneously on September 23, 1982, and were announced as individual tests. Based on the current definition of a “test,” they would be considered as “one test with two simultaneous detonations.”

Revision 16 Changes

Numerous changes have occurred since issuance of Revision 15 in December 2000, and a number of discrepancies were also discovered in the document. The Nevada Test Site was renamed the Nevada National Security Site (NNSS), and the Nellis Air Force Range is now the Nevada Test and Training Range (NTTR). Some reported parameters (e.g., latitude, longitude, and elevations) were found to be inaccurate, and there were requests to revise these elements. There was limited height of burst information in Revision 15 for the atmospheric nuclear tests, and this and other unclassified information was added. To make NV-209 an even more comprehensive reference document for U.S. nuclear tests, the following modifications were incorporated:

- Location coordinates were added to include all tests and were updated for accuracy.
- Height of burst or depth of burial were added for all detonations. (Height and depth values are from surface elevation to the working point of detonations.)
- Text paragraphs in the Introduction were expanded to cover additional related subjects (e.g., Plowshare tests in the *Treaties* section).
- Explanations for how some new or revised values were determined have been included.
- Inconsistencies (e.g., hole number designations, sponsor) and editorial errors were corrected.
- Figures and tables were revised for both comprehensiveness and editorial enhancements.
- A test reference column was added to the Detonations - By Name alphabetical listing (back section) to correlate between the Tests - By Date sequential tests/detonations listing (front section).
- A symbol (☪) was added to depict underground detonations that resulted in a surface subsidence crater.
- Definitions for specific topics were added.
- Radionuclide release information was clarified and made consistent with the primary reference

document on the subject (DOE, Nevada Operations Office [DOE/NV] publication *Radiological Effluents Released from U.S. Continental Tests 1961 through 1992*, DOE/NV-317).

- Information that was declassified subsequent to Revision 15 was added where relevant.
- Interesting facts were added to specific detonations as notes in the front sequential list of tests/detonations.

Detonation Times and Dates

Detonation time and date for all detonations listed in this document were converted from local time to Greenwich Mean Time (GMT). The date listed is the GMT date for the detonation. Times are given in the hundredth of a second where available; otherwise, a default value of 0.00 seconds is used.

Locations

The first test of a nuclear weapon was in the atmosphere on July 16, 1945, in a remote part of New Mexico on what was then the Alamogordo Bombing Range, now the White Sands Missile Range. The site is 55 miles northwest of Alamogordo, New Mexico.

The word “site” is defined as “the land area withdrawn for U.S. government testing purposes (e.g., NNSS, NTTR, Project Shoal) or the area secured to ensure no inadvertent public intrusion (e.g., Amchitka Island and Rulison test vicinity).” Almost all nuclear tests were conducted within an area withdrawn from public domain; however, this is not true for the Amchitka and Rulison underground nuclear tests, where no formal land withdrawal was recorded.

At various times between June 1946 and November 1962, atmospheric and underwater tests were conducted by the United States in the Marshall Islands (Bikini and Eniwetok Atolls), Christmas Island, Johnston Atoll in the Pacific Ocean, and over the South Atlantic Ocean.

Between January 1951 and July 1962, atmospheric and underground nuclear tests were conducted at the NNSS.

Since June 1963, all nuclear tests conducted in the United States have been underground, and most of them have been at the NNSS. Some tests were conducted on the NTTR; in central and northwestern Nevada; in Colorado, New Mexico, and Mississippi; and on Amchitka, one of the Aleutian Islands off the Alaska coast.

Latitude and longitude locations are the surface ground zero location of the drill hole or other emplacement location. Historical continental U.S. detonation coordinates were surveyed in the respective State Plane

Coordinate systems using the North American Datum of 1927 and are precise to within 1 foot (ft). The coordinates were mathematically converted to the North American Datum of 1984 reference model to be more consistent with modern surveying standards involving Global Positioning Systems (GPS). However, these conversions have known limitations; see <http://www.ngs.noaa.gov/TOOLS/Nadcon/Nadcon.shtml>.

All coordinates are presented in decimal degrees to six decimal places, indicating accuracies of better than 1 ft. Accuracy validation was not conducted on each individual detonation coordinate.

The following assumptions were made regarding horizontal GPS coordinates:

- Underground (tunnel and borehole) detonations on the NNSS are assumed to be accurate to 1–2 ft.
- Stationary (towers and surface platforms) atmospheric detonations on the NNSS and at other locations within the United States were assumed to be accurate to within 5 ft.
- Atmospheric detonations conducted from dynamic platforms within the United States (e.g., dropped from airplanes, suspended from balloons) are assumed to be accurate to within 10 ft.
- Detonations conducted at low elevations in the Pacific are assumed to be accurate to within 100 ft.

The following assumptions were made regarding surface elevation data (above sea level):

- Atmospheric detonations conducted on static platforms are assumed to be accurate to within 5 ft.
- Underground detonations are assumed to be accurate to within 1 ft.
- Barge and underwater detonations are assumed to be accurate to within 5 ft.
- Detonations conducted above or below the ocean surface were assigned a surface elevation of zero (0).

The following assumptions were made regarding height of burst, depth of burial, or depth underwater:

- Underground, underwater, and stationary atmospheric detonations are assumed to be accurate to within 5 ft.
- The distinction between surface and tower tests was set at 10 ft above the ground surface (see *Glossary*).
- For atmospheric tests conducted on dynamic platforms, the height of burst (when given) is assumed to be accurate to within 100 ft.

Moratorium

On October 31, 1958, the United States entered into a unilateral testing moratorium announced by President Dwight D. Eisenhower with the understanding that the Soviet Union also would refrain from conducting tests. The Soviet Union resumed testing in September 1961 with a series of the largest number of tests ever conducted.

On September 15, 1961, the United States resumed testing at the NNSS on a year-round basis.

On October 2, 1992, the United States entered into another unilateral moratorium on nuclear weapons testing announced by President George H.W. Bush. President Bill Clinton extended this moratorium in July 1993, and again in March 1994 until September 1995.

On August 11, 1995, President Clinton announced the decision to negotiate a comprehensive nuclear test ban treaty while continuing the cessation of nuclear testing by the United States.

On September 24, 1996, President Clinton signed the Comprehensive Nuclear Test Ban Treaty, which prohibits “any nuclear weapons test explosion” by any State Party. This treaty has not been ratified by Congress and is therefore not legally binding. (See *Treaties*.)

Purposes of U.S. Tests

Past tests have been described as being for one of six purposes: *Joint US-UK, Plowshare, Safety Experiment, Vela Uniform, Weapons Effects, and Weapons Related*. Revision 15 contained an additional purpose: Storage-Transportation. However, this was removed, as these tests were also Joint US-UK.

With the declassification of all previous simultaneous detonations, purpose is now attributed to each detonation. Weapons-related tests were conducted to gather data on nuclear devices; weapons-effects tests were conducted, usually by the U.S. Department of Defense (DoD), to determine the effects of nuclear detonations on military offensive and defensive systems; and tests conducted for the United Kingdom (UK) are shown as “Joint US-UK.” Individual tests/detonations could have different or multiple purposes. The purpose listed is considered the primary.

Radiological Effluents Released from Nuclear Detonations

Unless otherwise noted, all nuclear tests at the NNSS or NTTR before September 15, 1961, produced radioactivity detected offsite. (See *Glossary* for definition of “offsite.”) All tests before this date precede the testing moratorium that began October 31, 1958.

Unless otherwise noted, no test at the NNSS or NTTR on or after September 15, 1961, had a release of radioactivity that was detected offsite. The release of radioactivity from a test can occur

- accidentally as a result of a containment failure,
- accidentally or deliberately as a result of post-test operations (e.g., drillback, gas sampling, cementback), or
- deliberately as a result of post-test controlled purging of gases generally from a tunnel.

All releases resulting from a containment failure, even if not detected offsite, are reported. Radiation releases resulting from tunnel purging or normal operations are reported in this document regardless whether they were detected offsite or onsite only. These releases are listed in the DOE/NV publication *Radiological Effluents Released from U.S. Continental Tests 1961 through 1992*, DOE/NV-317.

Seismic Source Data

Detonation times and locations (latitude, longitude, and surface elevation) are included and are intended for use in the calibration of seismic stations that are part of the International Monitoring System called for in the 1996 Comprehensive Nuclear Test Ban Treaty.

Detonation time and location of past underground nuclear detonations are ideal quantities for calibrating a seismic network for accurate location of a new source. This ground truth information can be used, for example, to refine seismic velocity models and to determine station corrections for parts of North America.

Those detonations that could be especially valuable for International Monitoring System calibration are identified with **boldface** type. Included in this subgroup are 8 detonations that took place somewhere other than the NNSS and 14 that occurred at the NNSS. These 14 were selected because they

- occurred within the last 5 years of testing, therefore increasing the chance that the detonations were recorded on modern seismograph systems;
- are well distributed about the NNSS to include at least two from each of the major test regions (e.g., Pahute Mesa, Rainier Mesa, and Yucca Flat);
- are relatively large, allowing recording on multiple instruments; or
- were the subject of special study.

The seismic source data for underground nuclear detonations was gathered from all available official sources, including reports by DOE, its predecessors and contractors, and the Defense Nuclear Agency (DNA). All

reasonable effort has been expended to ensure the greatest possible accuracy of this seismic data.

Time calibrations are obtained from the National Institute of Standards and Technology WWV radio stations. Tests were typically planned to be detonated on the exact hour, minute, or second. However, the firing systems always introduce some delay so that the actual detonation time could be as much as 150 milliseconds later than intended. When information on this delay is available, detonation times are given to the nearest 0.01 second, uncorrected for WWV propagation; otherwise, a default value of 0.00 is given.

Series

Each series of tests is given a name, such as *Operation Crossroads*. U.S. nuclear tests were conducted on an intermittent basis from June 1946 to October 1958.

On September 15, 1961, when the United States resumed testing at the NNSS on a year-round basis with Operation Nougat, tests were grouped for fiscal and reporting purposes according to the fiscal year in which they took place. For example, fiscal year 1963 tests—which began July 1, 1962, and extended through June 30, 1963—were in the Operation Storax series.

Between April and November 1962, the United States conducted Operation Dominic, which included the DoD Operation Fishbowl high-altitude tests in the Pacific. The DoD also conducted four weapons-effects tests at the NNSS in July 1962 as Operation Sunbeam.

In 1976, the federal government changed the fiscal year to begin on October 1 and end on September 30. Accordingly, the fiscal year 1976 series (Operation Anvil) did not end on June 30 but was extended through September 30, 1976—a period of 15 months.

Treaties

On August 5, 1963, the United States and the Soviet Union signed the Limited Test Ban Treaty, which effectively banned testing of nuclear weapons in the atmosphere, oceans, and space. This treaty entered into force on October 10, 1963.

On July 1, 1968, the United States, the Soviet Union, and 60 other countries signed the Treaty on the Non-Proliferation of Nuclear Weapons (also known as the Nuclear Nonproliferation Treaty). This treaty entered into force on March 5, 1970, and represents the only binding commitment in a multilateral treaty to the goal of disarmament by the nuclear-weapon states.

On July 3, 1974, the United States and the Soviet Union signed the Threshold Test Ban Treaty, restricting all

underground nuclear test explosions to yields no greater than 150 kilotons (kt). On May 28, 1976, the nations also signed the Peaceful Nuclear Explosions Treaty, which stemmed from Article III of the Threshold Test Ban Treaty and restricts individual peaceful nuclear explosions to yields no greater than 150 kt. These treaties entered into force on December 11, 1990.

Discussion on peaceful uses for nuclear explosions began in the mid-1950s and culminated in a formal Plowshare Program under the Division of Military Application in June 1957. This program was publicly announced on June 6, 1958. No Plowshare nuclear detonations took place until December 10, 1961, (*Gnome*) due to a moratorium on nuclear testing; however, many plans and experiments using non-nuclear detonations were conducted during the period. From late 1961 through mid-1973, the United States conducted 27 Plowshare nuclear tests, including 36 individual nuclear device detonations. Additionally, there were several more tests listed as “weapons related” that were also related to Plowshare explosives. The Plowshare Program was discontinued at the end of 1975 due to economic and environmental concerns,

The Joint Verification Experiment was conducted in 1988 by the United States and the Soviet Union as a prelude to the signing of the 1990 Protocols to the Threshold Test Ban Treaty and the Peaceful Nuclear Explosion Treaty. Proposed treaty verification techniques and measurements were employed on the *Kearsarge test* conducted by the United States on August 17, 1988, at the NNSS; and on the *Shagan test* conducted by the Soviet Union on September 14, 1988, at the Semipalatinsk Test Site.

In May 1995, the United Nations reached consensus and indefinitely extended the Nuclear Nonproliferation Treaty. This action was a priority for the U.S. arms control agenda and critical to proceeding with a test ban treaty. On August 11, 1995, President Clinton announced the decision to negotiate a comprehensive nuclear test ban treaty while continuing the cessation of nuclear testing by the United States.

Even though President Clinton signed the Comprehensive Nuclear Test Ban Treaty on September 24, 1996, DOE has been directed to maintain an underground test readiness program in case it is in the “supreme national interest” to resume nuclear weapons testing.

Types and Purposes

The definition of terms used in this document appears in the *Glossary*. *Type* refers to the method of deployment of the nuclear device at time of detonation, such as *tower*, *tunnel*, or *airdrop*.

Purpose indicates whether the test was part of the weapons development program, a DoD effects test, a Joint US-UK test, or was part of some special program that involved the use of nuclear devices. In the *Summary*, the sum of all tests conducted underground (*tunnel*, *shaft*, and *crater*) appears as *Total Underground*. With the exception of five underwater tests, the remaining tests appear as *Total Atmospheric*.

Yields

The nomenclature for test yields varied according to information policy governing specific years. In some cases, no yield information has been released; in a few cases, the terms “very slight” and “slight” were used without amplification. For completeness, even underground nuclear detonations with little or no nuclear yield have been included. Except for tests where specific yields or relative specific yields such as “about 2 kt,” “several Mt,” or “less than 0.1 kt” were announced, test yields are given in these terms:

1945 through 1963

- Low (less than 20 kt)
- Intermediate (20 to 200 kt)
- Submegaton (less than 1 Mt, but more than 200 kt)
- Low Megaton (from 1 to several Mt)
- Megaton Range

1964 through February 1976

- Less than 20 kt
- 20 to 200 kt
- 200 to 1,000 kt

March 1976

During a series of high-yield tests conducted during this month, two ranges were added, and the 200 to 1,000 kt range was dropped.

- 200 to 500 kt
- 500 to 1,000 kt

Since March 1976

On March 31, 1976, the United States and the Soviet Union agreed to limit the maximum yield of underground tests to 150 kt.

- Less than 20 kt
- Less than 150 kt
- 20 to 150 kt

Joint Verification Experiment

Data exchanges provided for in the Protocol to the 1974 Threshold Test Ban Treaty required the exchange of historic explosion data on five detonations with yields within the 100 to 150 kt range. Under the Joint Verification Experiment of 1988, this yield range was added. However, this yield range now applies only to *Kearsarge*; the other detonations now have specified yields.

- 100 to 150 kt

Notes on Research

When using NV-209 as a research tool, there are a few hints and tricks that can develop better results. When researching a particular test, using names of locations and institutions at the date of the test often results in more and better data. The reason for this is that many archives and library databases have not been updated with current affiliations. For example, searching for “LASL” instead of “LANL” will often give different results in computer searches.

Some key dates and institutions that are particularly important for use with NV-209 are as follows:

Test Areas

- Site Mercury
1950–1951
- Nevada Test Site (NTS)
1951–1952
- Nevada Proving Ground
1952–1954
- NTS
1955–2010
- Nevada National Security Site (NNSS)
2010–present

Federal Agencies

- Atomic Energy Commission (AEC)
1946–1974
- Energy Research and Development Administration (ERDA) 1974–1977
- U.S. Department of Energy (DOE)
1977–2001
- DOE/National Nuclear Security Administration (NNSA) 2001–present

Laboratories

- Los Alamos (Manhattan Engineering District)
1943–1947
- Los Alamos Scientific Laboratory (LASL)
1947–1980
- Los Alamos National Laboratory (LANL)
1980–present
- University of California Radiation Laboratory (RL)
1952–1958
- Lawrence Radiation Laboratory (LRL)
1958–1971
- Lawrence Livermore Laboratory (LLL)
1971–1980
- Lawrence Livermore National Laboratory (LLNL)
1980–present

DTRA is another agency that is not specifically cited in NV-209 but is very relevant to nuclear testing. It, too, has had numerous name changes over the years, and associating the date of the test with the correct agency name will often give better research results.

- Armed Forces Special Weapons Project (AFSWP)
1947–1959
- Defense Atomic Support Agency (DASA)
1959–1971
- Defense Nuclear Agency (DNA)
1971–1996
- Defense Special Weapons Agency (DSWA)
1996–1998
- Defense Threat Reduction Agency (DTRA)
1998–present

One last hint to aid in research: Although the tests are listed by GMT, using local time will often assist in identifying details in associated photographs. Before 1966, time information is even more confusing, as there was no standard on the use of Daylight Saving Time. Many of the early tests were conducted at sunrise; thus, an hour or two difference can make a substantial difference in ambient lighting when trying to identify unknown photographs.

Table 1 - U.S. Nuclear Tests — Total — By Calendar Year

Calendar Year	US	US-UK
CY1945	1	0
CY1946	2	0
CY1947	0	0
CY1948	3	0
CY1949	0	0
CY1950	0	0
CY1951	16	0
CY1952	10	0
CY1953	11	0
CY1954	6	0
CY1955	18	0
CY1956	18	0
CY1957	32	0
CY1958	77	0
CY1959	0	0
CY1960	0	0
CY1961	10	0
CY1962	96	2
CY1963	43	4
CY1964	45	2
CY1965	38	1
CY1966	48	0
CY1967	42	0
CY1968	56	0

Calendar Year	US	US-UK
CY1969	46	0
CY1970	39	0
CY1971	24	0
CY1972	27	0
CY1973	24	0
CY1974	22	1
CY1975	22	0
CY1976	20	1
CY1977	20	0
CY1978	19	2
CY1979	15	1
CY1980	14	3
CY1981	16	1
CY1982	18	1
CY1983	18	1
CY1984	18	2
CY1985	17	1
CY1986	14	1
CY1987	14	1
CY1988	15	0
CY1989	11	1
CY1990	8	1
CY1991	7	1
CY1992	6	0

Total US Tests	1,026
Total US-UK	<u>28</u>
TOTAL TESTS	1,054

*NOTE: Totals **do not** include two combat uses of nuclear weapons, which are not considered "tests."
 The first combat detonation was a 15-kt weapon airdropped August 6, 1945, at Hiroshima, Japan.
 The second was a 21-kt weapon airdropped August 9, 1945, at Nagasaki, Japan.*

Table 2 - U.S. Nuclear Tests — Total — By Type

Type	US	US-UK
Airburst	1	0
Airdrop	52	0
Balloon	25	0
Barge	36	0
Rocket	12	0
Surface	24	4
Tower	56	0
Total Atmospheric	206	4
Crater	9	0
Shaft	739	24
Tunnel	67	0
Total Underground	815	24
Total Underwater	5	0
TOTAL TESTS	1,026	28

Table 3 - U.S. Nuclear Tests — Total — By Location

Location	US	US-UK
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Total South Atlantic	3	0
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Bikini Atoll	23	0
Christmas Island	24	0
Enewetak Atoll	43	0
Johnston Island	12	0
Pacific	4	0
Total Pacific	106	0

near Alamogordo, New Mexico	1	0
Amchitka Island, Alaska	3	0
near Carlsbad, New Mexico	1	0
Central Nevada	1	0
near Fallon, Nevada	1	0
near Farmington, New Mexico	1	0
near Parachute, Colorado	1	0
near Hattiesburg, Mississippi	2	0
Nevada Test and Training Range	1	4
near Meeker, Colorado	1	0
Total Other	13	4

Atmospheric	100	0
Underground	804	24
Total NNSS	904	24

TOTAL TESTS	1,026	28
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Table 4 - U.S. Nuclear Tests/Detonations — Total — By Location

A **test** is defined in the Threshold Test Ban Treaty as either a *single underground nuclear explosion* (detonation) conducted at a test site, or *two or more underground nuclear explosions* (detonations) conducted within an area delineated by a circle having a diameter of 2 kilometers (1.24 miles) and conducted within a total period of time not to exceed 0.1 second. Sixty-three of the 1,054 nuclear tests conducted by the United States consisted of more than one underground nuclear explosion (detonation).

Nevada National Security Site - 62 tests had simultaneous detonations
Rifle, Colorado - 1 test had a simultaneous detonation

Location	Number of Tests	Number of Detonations
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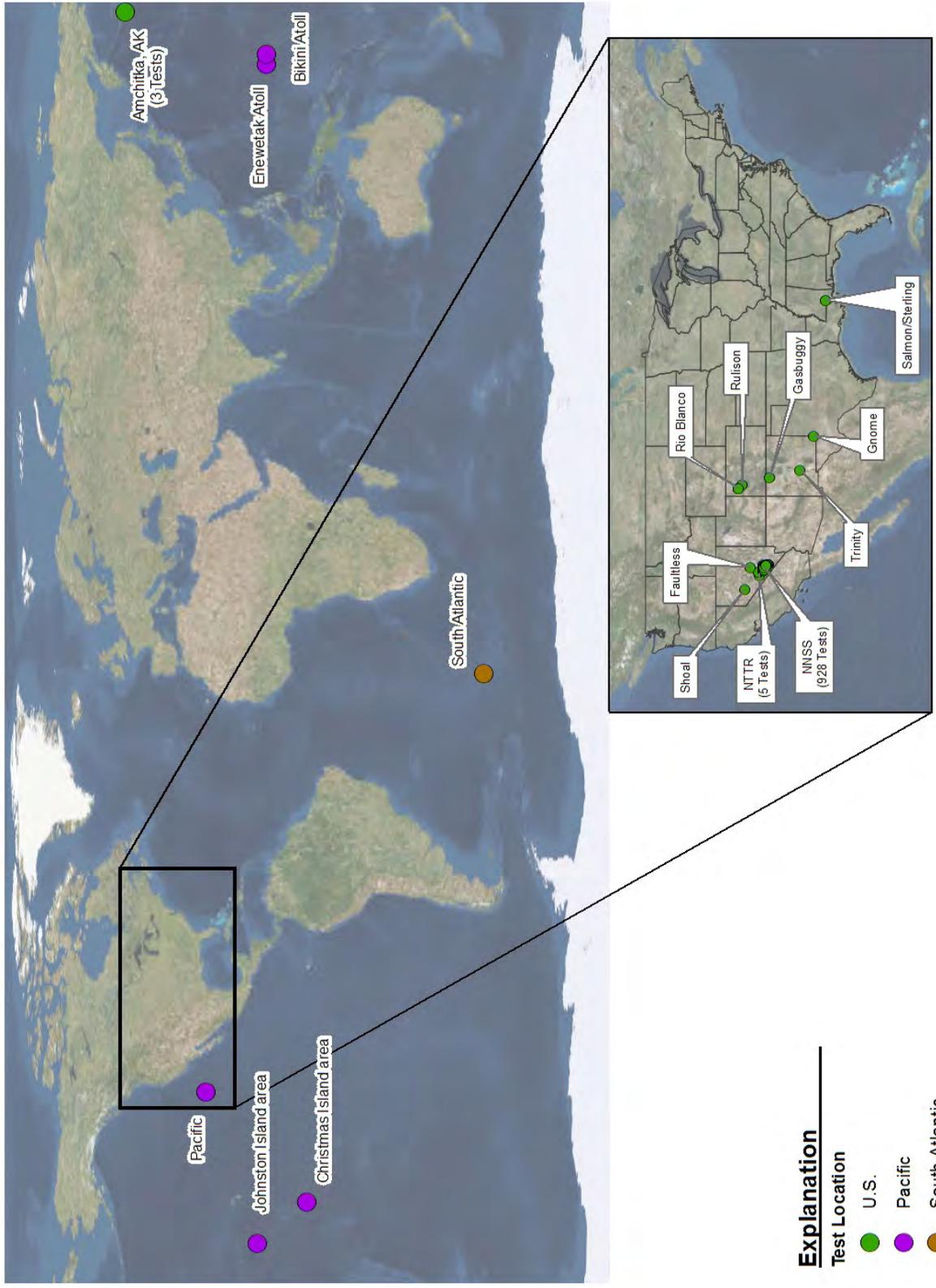
Total South Atlantic	3	3
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Bikini Atoll	23	23
Christmas Island	24	24
Enewetak Atoll	43	43
Johnston Island	12	12
Pacific	4	4
Total Pacific	106	106

near Alamogordo, New Mexico	1	1
Amchitka Island, Alaska	3	3
near Carlsbad, New Mexico	1	1
Central Nevada	1	1
near Fallon, Nevada	1	1
near Farmington, New Mexico	1	1
near Parachute, Colorado	1	1
near Hattiesburg, Mississippi	2	2
Nevada Test and Training Range	5	5
near Meeker, Colorado	1	3
Total Other	17	19

Atmospheric	100	100
Underground	828	921
Total NNSS	928	1,021

TOTAL	1,054	1,149
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Explanation

- Test Location**
- U.S.
 - Pacific
 - South Atlantic

Source: Navarro GIS, 2015; ESRI, 2015; NationalAtlas.gov, 2015

Figure 1. U.S. Nuclear Test Locations – NNSS and Other

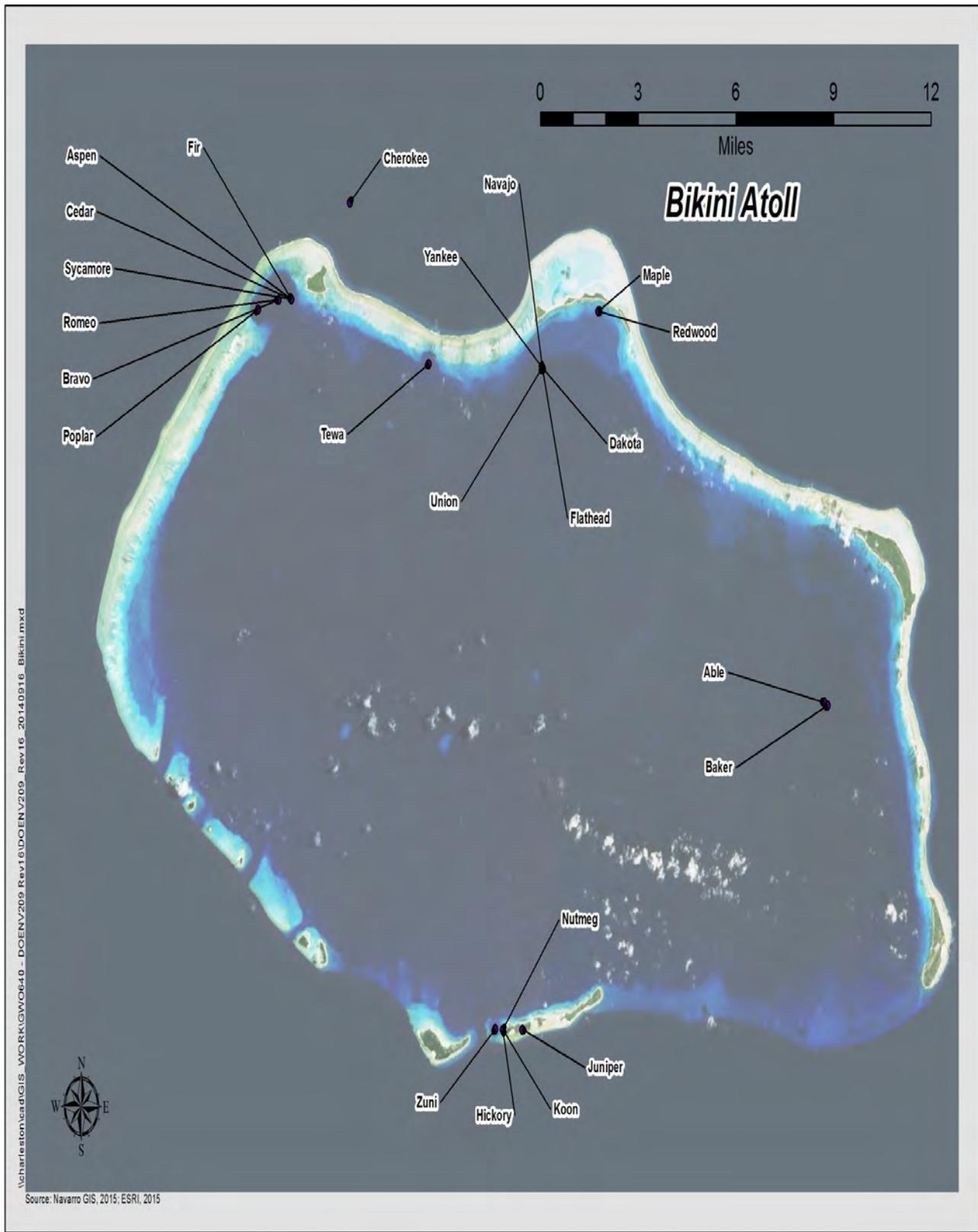


Figure 2. U.S. Nuclear Test Locations – Bikini Atoll

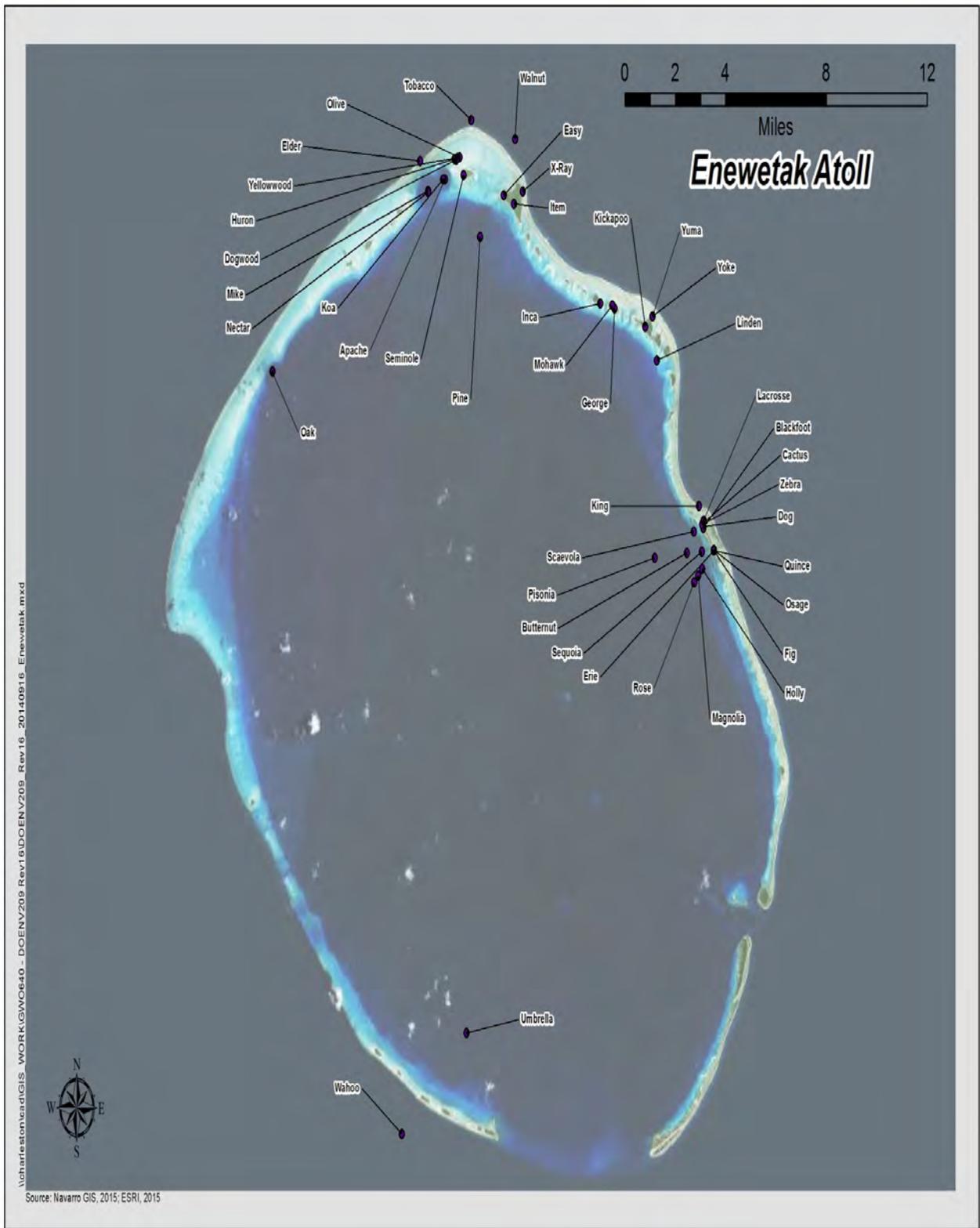


Figure 3. U.S. Nuclear Test Locations – Enewetak Atoll

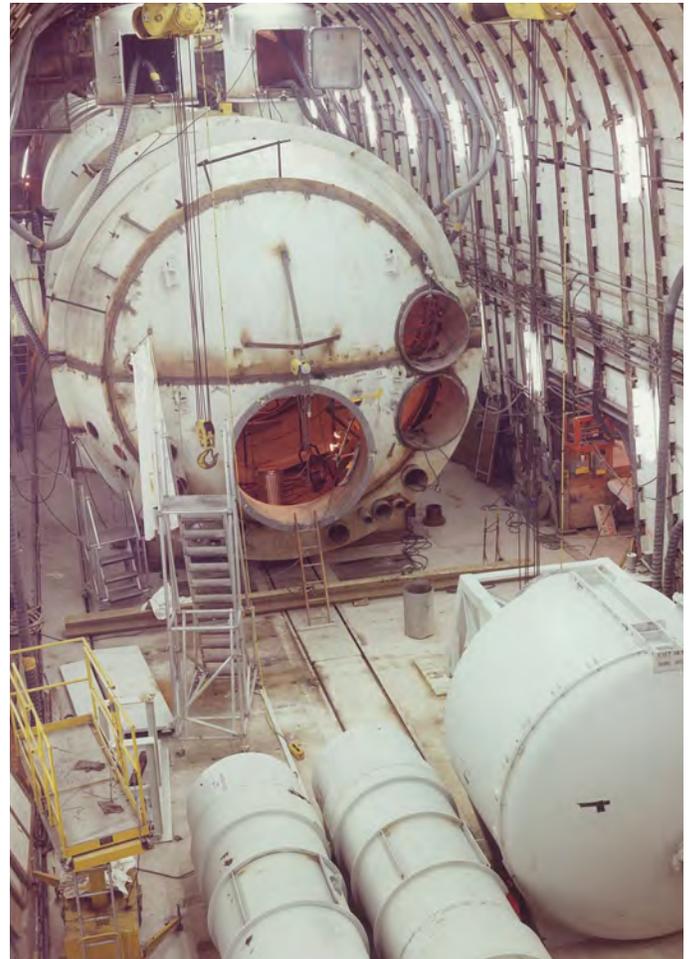
Table 5 - U.S. Nuclear Detonations — Total — By Purpose

Purpose	Detonations
Joint US-UK	28*
Plowshare	36
Safety Experiment	88
Vela Uniform	7
Weapons Effects	100
Weapons Related	890
TOTAL DETONATIONS	1,149

* Four of the Joint US-UK tests were storage-transportation tests conducted on the Nevada Test and Training Range.



Priscilla was a test conducted on June 24, 1957, at the NNSS. It was a balloon, weapons related test that produced a yield of 37 kt.



Diamond Sculls was a test conducted on July 20, 1972, in a tunnel at Rainier Mesa on the NNSS. *Diamond Sculls* was a weapons effects test where the radiation from the detonation traveled 2,000 ft down a tapered horizontal line-of-sight pipe to the test chambers (shown above), which were 27 ft in diameter. Fast-closure doors in the pipe stopped flying debris after the radiation went by and protected the experiments from debris-impact damage.

Barnwell was a test conducted on December 8, 1989, underground at Pahute Mesa on the NNSS. *Barnwell* was a Joint US-UK test with a yield of 20 to 150 kt. Shown at right is the diagnostic rack ready for lowering down the emplacement hole.





Cannikin was a test conducted on November 6, 1971, at Amchitka Island, Alaska, one of the westernmost islands on the Aleutian Islands chain. *Cannikin* was a weapons related test of the W71 Spartan missile warhead. With a yield of less than 5 Mt, *Cannikin* is the largest underground detonation conducted by the United States and is important from a seismic data perspective.



Handley was conducted on March 26, 1970, in hole U20m in the northwestern part of the NNSS. The test yield was more than 1 Mt, one of the largest detonations conducted at the NNSS. The downhole emplacement of the *Handley* device and diagnostics rack is shown above.



Sedan crater was formed when a 104-kt explosion buried under 635 ft of desert alluvium was fired at the NNSS on July 6, 1962, displacing 12 million tons of earth. The crater is 320 ft deep and 1,280 ft in diameter.



Project 56 No. 4 was a test conducted on January 18, 1956, in Area 11 on the NNSS. *Project 56 No. 4* was a safety experiment with a yield of 1 ton. Part of the experiment included acquiring data about plutonium dispersal under conditions related to detonations where there could be little to no yield.

**Table 6 - U.S. Nuclear Tests/Detonations Conducted
on the Nevada National Security Site — By Area**

Area on the NNSS	Number of Tests	Number of Detonations
1	8	9
2	144	169
3	266	288
4	40	44
5	19	19
6	4	6
7	92	92
8	13	15
9	115	133
10	57	71
11	9	9
12	61	62
15	3	3
16	6	6
18	5	5
19	36	36
20	49	49
30	1	5
TOTAL	928	1,021

Test Regions on the NNSS	
Region	Area(s) on the NNSS (see Figure 4)
Buckboard Mesa	18
Frenchman Flat	5, 11
Pahute Mesa	19, 20
Rainier Mesa	12
Mine Mountain	16
Timber Mountain	30
Yucca Flat	1, 2, 3, 4, 6, 7, 8, 9, 10, 15

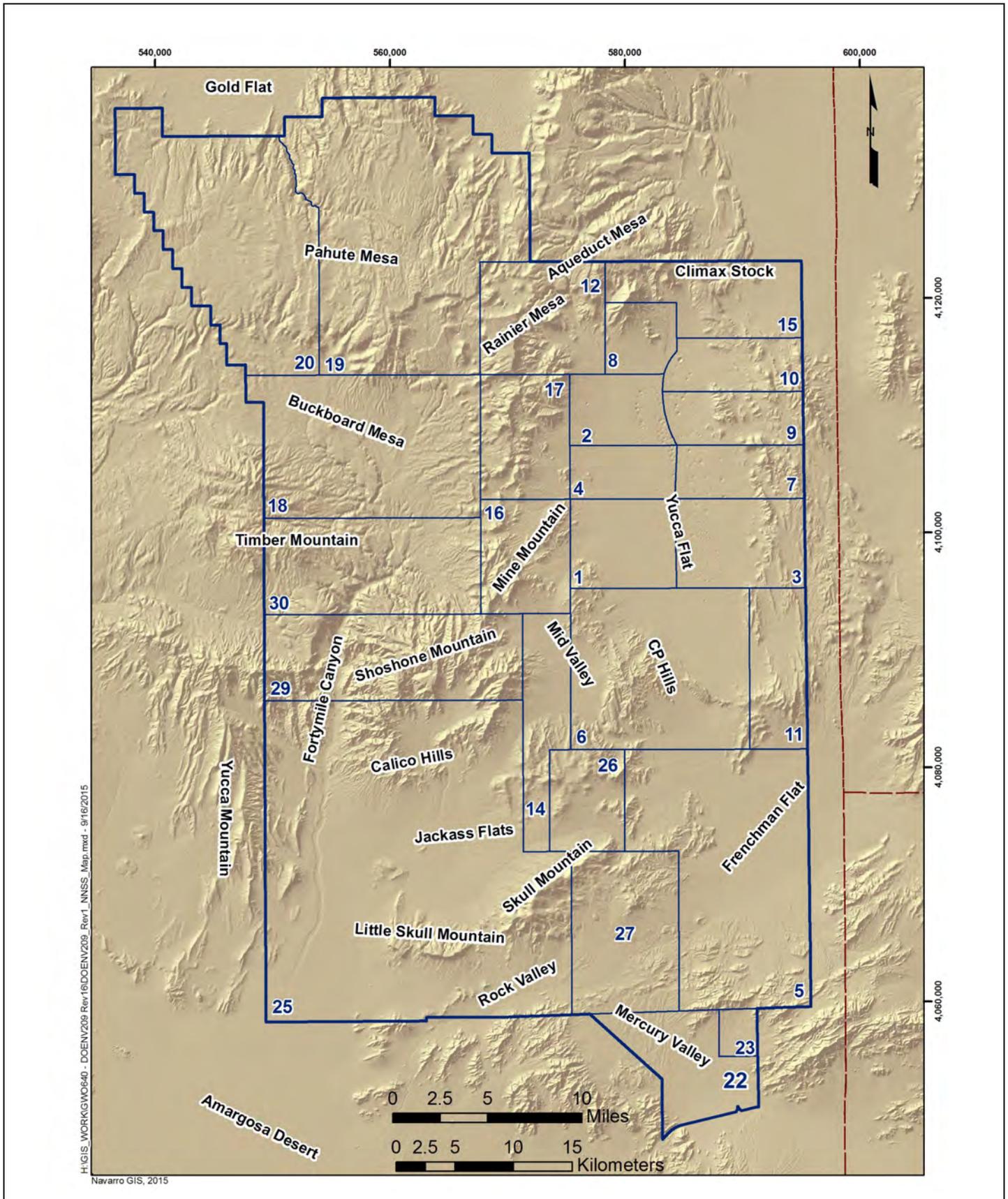


Figure 4. U.S. Nuclear Test Locations – Areas on the NNSS

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U.S. Nuclear Tests – By Date

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type	
1	Trinity First test of a nuclear weapon ("Fat Man") Plutonium as sole fissile material	07/16/1945	LANL	near Alamogordo, New Mexico	----	Tower
Operation Crossroads						
2	Able Plutonium as sole fissile material Mark 3 device similar to "Fat Man"	06/30/1946	LANL/DoD	Bikini Atoll	----	Airdrop
3	Baker Plutonium as sole fissile material Mark 3 device similar to "Fat Man"	07/24/1946	LANL/DoD	Bikini Atoll	----	Underwater
Operation Sandstone						
4	X-Ray	04/14/1948	LANL	Enewetak Atoll	----	Tower
5	Yoke	04/30/1948	LANL	Enewetak Atoll	----	Tower
6	Zebra	05/14/1948	LANL	Enewetak Atoll	----	Tower
Operation Ranger						
7	Able	01/27/1951	LANL	NNSS	Area 5	Airdrop
8	Baker	01/28/1951	LANL	NNSS	Area 5	Airdrop
9	Easy	02/01/1951	LANL	NNSS	Area 5	Airdrop
10	Baker-2	02/02/1951	LANL	NNSS	Area 5	Airdrop
11	Fox	02/06/1951	LANL	NNSS	Area 5	Airdrop
Operation Greenhouse						
12	Dog	04/07/1951	LANL	Enewetak Atoll	----	Tower
13	Easy	04/20/1951	LANL	Enewetak Atoll	----	Tower
14	George First thermonuclear test explosion	05/08/1951	LANL	Enewetak Atoll	----	Tower
15	Item First test of the boosting principle	05/24/1951	LANL	Enewetak Atoll	----	Tower
Operation Buster						
16	Able Radioactivity not detected offsite	10/22/1951	LANL	NNSS	Area 7	Tower
17	Baker	10/28/1951	LANL	NNSS	Area 7	Airdrop
18	Charlie	10/30/1951	LANL	NNSS	Area 7	Airdrop
19	Dog	11/01/1951	LANL	NNSS	Area 7	Airdrop
20	Easy	11/05/1951	LANL	NNSS	Area 7	Airdrop
Operation Jangle						
21	Sugar	11/19/1951	LANL/DoD	NNSS	Area 9	Surface
22	Uncle First underground test at the NNSS	11/29/1951	LANL/DoD	NNSS	U10 Uncle	Crater
Operation Tumbler-Snapper						
23	Able	04/01/1952	LANL/DoD	NNSS	Area 5	Airdrop

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
12:29:00.00	33.677280	-106.475378	4,624	100	Weapons Related	21 kt	1
Operation Crossroads							
22:00:00.00	11.590000	165.516700	0	523	Weapons Effects	21 kt	2
21:35:00.00	11.589200	165.518200	0	-90	Weapons Effects	21 kt	3
Operation Sandstone							
18:17:00.00	11.665300	162.234000	0	200	Weapons Related	37 kt	4
18:09:00.00	11.619410	162.313825	0	200	Weapons Related	49 kt	5
18:04:00.00	11.551450	162.348100	10	200	Weapons Related	18 kt	6
Operation Ranger							
13:45:00.00	36.805100	-115.950200	3,140	1,060	Weapons Related	1 kt	7
13:52:00.00	36.805100	-115.950200	3,140	1,080	Weapons Related	8 kt	8
13:47:00.00	36.805100	-115.950200	3,140	1,080	Weapons Related	1 kt	9
13:49:00.00	36.805100	-115.950200	3,140	1,100	Weapons Related	8 kt	10
13:47:00.00	36.805100	-115.950200	3,140	1,435	Weapons Related	22 kt	11
Operation Greenhouse							
18:34:00.00	11.551866	162.347893	10	300	Weapons Related	81 kt	12
18:27:00.00	11.665400	162.233800	10	300	Weapons Related	47 kt	13
21:30:00.00	11.624300	162.303900	10	200	Weapons Related	225 kt	14
18:17:00.00	11.669300	162.241500	10	200	Weapons Related	45.5 kt	15
Operation Buster							
14:00:00.00	37.083250	-116.024700	4,169	100	Weapons Related	Less than 0.1 kt	16
15:20:00.00	37.084950	-116.021125	4,193	1,118	Weapons Related	3.5 kt	17
15:00:00.00	37.084950	-116.021250	4,193	1,132	Weapons Related	14 kt	18
15:30:00.00	37.084550	-116.020850	4,193	1,417	Weapons Related	21 kt	19
16:30:00.00	37.091900	-116.025300	4,224	1,314	Weapons Related	31 kt	20
Operation Jangle							
17:00:00.00	37.131467	-116.039417	4,215	4	Weapons Effects	1.2 kt	21
20:00:00.00	37.169792	-116.043312	4,299	-17	Weapons Effects	1.2 kt	22
Operation Tumbler-Snapper							
17:00:00.00	36.797966	-115.936418	3,077	793	Weapons Effects	1 kt	23

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Tumbler-Snapper – Continued

24	Baker	04/15/1952	LANL/DoD	NNSS	Area 7	Airdrop
25	Charlie	04/22/1952	LANL/DoD	NNSS	Area 7	Airdrop
26	Dog	05/01/1952	LANL	NNSS	Area 7	Airdrop
27	Easy	05/07/1952	LANL	NNSS	Area 1	Tower
28	Fox	05/25/1952	LANL	NNSS	Area 4	Tower
29	George	06/01/1952	LANL	NNSS	Area 3	Tower
30	How	06/05/1952	LANL	NNSS	Area 2	Tower

Operation Ivy

31	Mike Experimental thermonuclear device	10/31/1952	LANL	Enewetak Atoll	----	Surface
32	King Largest fission device	11/15/1952	LANL	Enewetak Atoll	----	Airdrop

Operation Upshot-Knothole

33	Annie	03/17/1953	LANL	NNSS	Area 3	Tower
34	Nancy	03/24/1953	LANL	NNSS	Area 4	Tower
35	Ruth	03/31/1953	LLNL	NNSS	Area 7	Tower
36	Dixie	04/06/1953	LANL	NNSS	Area 7	Airdrop
37	Ray	04/11/1953	LLNL	NNSS	Area 4	Tower
38	Badger	04/18/1953	LANL	NNSS	Area 2	Tower
39	Simon	04/25/1953	LANL	NNSS	Area 1	Tower
40	Encore	05/08/1953	LANL/DoD	NNSS	Area 5	Airdrop
41	Harry	05/19/1953	LANL	NNSS	Area 3	Tower
42	Grable Fired from 280mm gun Test of the Mk9 nuclear weapon	05/25/1953	LANL	NNSS	Area 5	Airburst
43	Climax	06/04/1953	LANL	NNSS	Area 7	Airdrop

Operation Castle

44	Bravo Experimental thermonuclear device Highest-yield U.S. nuclear test	02/28/1954	LANL	Bikini Atoll	----	Surface
45	Romeo	03/26/1954	LANL	Bikini Atoll	----	Barge
46	Koon	04/06/1954	LLNL	Bikini Atoll	----	Surface
47	Union	04/25/1954	LANL	Bikini Atoll	----	Barge
48	Yankee	05/04/1954	LANL	Bikini Atoll	----	Barge
49	Nectar	05/13/1954	LANL	Enewetak Atoll	----	Barge

Operation Teapot

50	Wasp	02/18/1955	LANL	NNSS	Area 7	Airdrop
51	Moth	02/22/1955	LANL	NNSS	Area 3	Tower
52	Tesla	03/01/1955	LLNL	NNSS	Area 9	Tower
53	Turk	03/07/1955	LLNL	NNSS	Area 2	Tower

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Tumbler-Snapper – Continued

17:30:00.00	37.084120	-116.020306	4,193	1,109	Weapons Effects	1 kt	24
17:30:00.00	37.084400	-116.021143	4,193	3,447	Weapons Related	31 kt	25
16:30:00.00	37.084120	-116.021140	4,193	1,040	Weapons Related	19 kt	26
12:15:00.00	37.053040	-116.103504	4,329	300	Weapons Related	12 kt	27
12:00:00.00	37.095488	-116.103616	4,309	300	Weapons Related	11 kt	28
11:55:00.00	37.095488	-116.103616	4,028	300	Weapons Related	15 kt	29
11:55:00.00	37.138372	-116.118258	4,492	300	Weapons Related	14 kt	30

Operation Ivy

19:15:00.00	11.667000	162.189900	10	7	Weapons Related	10.4 Mt	31
23:30:00.00	11.558800	162.345400	0	1,480	Weapons Related	500 kt	32

Operation Upshot-Knothole

13:20:00.00	37.095488	-116.103616	4,026	300	Weapons Related	16 kt	33
13:10:00.00	37.095488	-116.103616	4,309	300	Weapons Related	24 kt	34
13:00:00.00	37.085291	-116.022137	4,000	305	Weapons Related	200 tons	35
15:30:00.00	37.084604	-116.020654	4,025	6,022	Weapons Related	11 kt	36
12:45:00.00	37.098891	-116.093345	4,026	100	Weapons Related	200 tons	37
12:35:00.00	37.138372	-116.118258	4,491	300	Weapons Related	23 kt	38
12:30:00.00	37.053040	-116.103504	4,239	300	Weapons Related	43 kt	39
15:30:00.00	36.797923	-115.929776	3,077	2,423	Weapons Effects	27 kt	40
12:05:00.00	37.040342	-116.026241	4,006	300	Weapons Related	32 kt	41
15:30:00.00	36.797923	-115.929776	3,077	524	Weapons Related	15 kt	42
11:15:00.00	37.087549	-116.019208	4,025	1,334	Weapons Related	61 kt	43

Operation Castle

18:45:00.00	11.697130	165.274200	10	7	Weapons Related	15 Mt	44
18:30:00.00	11.697130	165.274200	0	7	Weapons Related	11 Mt	45
18:20:00.00	11.503166	165.369450	10	14	Weapons Related	110 kt	46
18:05:00.00	11.679000	165.391500	0	7	Weapons Related	6.9 Mt	47
18:10:00.00	11.679000	165.391500	0	7	Weapons Related	13.5 Mt	48
18:20:00.00	11.666600	162.190000	0	7	Weapons Related	1.69 Mt	49

Operation Teapot

20:00:00.00	37.086535	-116.022735	4,195	762	Weapons Effects	1 kt	50
13:45:00.00	37.095488	-116.103616	4,026	300	Weapons Related	2 kt	51
13:30:00.00	37.125389	-116.048387	4,021	300	Weapons Related	7 kt	52
13:20:00.00	37.138372	-116.118258	4,491	500	Weapons Related	43 kt	53

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
Operation Teapot – Continued					
54	Hornet	03/12/1955	LANL	NNSS	Area 3 Tower
55	Bee	03/22/1955	LANL	NNSS	Area 7 Tower
56	ESS (Effects SubSurface)	03/23/1955	LANL	NNSS	U10 ESS Crater
57	Apple-1	03/29/1955	LANL	NNSS	Area 4 Tower
58	Wasp Prime	03/29/1955	LANL	NNSS	Area 7 Airdrop
59	HA Named "HA" for "high altitude" in reference to its intended detonation at an altitude of 40,000 ft	04/06/1955	LANL	NNSS	Area 1 Airdrop
60	Post	04/09/1955	LLNL	NNSS	Area 9 Tower
61	MET (Military Effects Test)	04/15/1955	LANL/DoD	NNSS	Area 5 Tower
62	Apple-2	05/05/1955	LANL	NNSS	Area 1 Tower
63	Zucchini	05/15/1955	LANL	NNSS	Area 7 Tower
Operation Wigwam					
64	Wigwam	05/14/1955	LANL/DoD	Pacific	---- Underwater
Operation Project 56					
65	Project 56 No. 1	11/01/1955	LANL	NNSS	Area 11a Surface
66	Project 56 No. 2 Plutonium dispersal	11/03/1955	LANL	NNSS	Area 11b Surface
67	Project 56 No. 3 Plutonium dispersal	11/05/1955	LANL	NNSS	Area 11c Surface
68	Project 56 No. 4 Plutonium dispersal	01/18/1956	LANL	NNSS	Area 11d Surface
Operation Redwing					
69	Lacrosse	05/04/1956	LANL	Enewetak Atoll	---- Surface
70	Cherokee First airdrop by U.S. of a thermonuclear weapon	05/20/1956	LANL/DoD	Bikini Atoll	---- Airdrop
71	Zuni	05/27/1956	LLNL	Bikini Atoll	---- Surface
72	Yuma	05/27/1956	LLNL	Enewetak Atoll	---- Tower
73	Erie	05/30/1956	LANL	Enewetak Atoll	---- Tower
74	Seminole	06/06/1956	LANL	Enewetak Atoll	---- Surface
75	Flathead	06/12/1956	LANL	Bikini Atoll	---- Barge
76	Blackfoot	06/12/1956	LANL	Enewetak Atoll	---- Tower
77	Kickapoo	06/13/1956	LLNL	Enewetak Atoll	---- Tower
78	Osage	06/16/1956	LANL	Enewetak Atoll	---- Airdrop
79	Inca	06/21/1956	LLNL	Enewetak Atoll	---- Tower
80	Dakota	06/25/1956	LANL	Bikini Atoll	---- Barge
81	Mohawk	07/02/1956	LLNL	Enewetak Atoll	---- Tower

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Teapot – Continued

13:20:00.00	37.040342	-116.026241	4,007	300	Weapons Related	4 kt	54
13:05:00.00	37.094780	-116.024575	4,245	500	Weapons Related	8 kt	55
20:30:00.00	37.168412	-116.044669	4,288	-67	Weapons Effects	1 kt	56
12:55:00.00	37.095488	-116.103616	4,309	500	Weapons Related	14 kt	57
18:00:00.00	37.086535	-116.022735	4,194	739	Weapons Related	3 kt	58
18:00:00.00	37.028664	-116.058714	4,038	40,000	Weapons Effects	3 kt	59
12:30:00.00	37.122090	-116.035276	4,236	300	Weapons Related	2 kt	60
19:15:00.00	36.797923	-115.929776	3,078	400	Weapons Effects	22 kt	61
12:10:00.00	37.053040	-116.103504	4,236	500	Weapons Related	29 kt	62
12:00:00.00	37.094780	-116.024575	4,245	500	Weapons Related	28 kt	63

Operation Wigwam

20:00:00.00	28.733340	-126.266743	0	-2,000	Weapons Effects	30 kt	64
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Operation Project 56

22:10:00.00	36.984430	-115.961640	4,200	3	Safety Experiment	Zero	65
21:15:00.00	36.980075	--115.959525	4,200	3	Safety Experiment	Zero	66
19:55:00.00	36.975695	-115.957455	4,200	3	Safety Experiment	36 grams	67
21:30:00.00	36.971340	-115.955350	4,200	3	Safety Experiment	1 ton	68

Operation Redwing

18:25:00.00	11.553878	162.348050	17	0	Weapons Related	40 kt	69
17:51:00.00	11.723000	165.306000	0	4,350	Weapons Related	3.8 Mt	70
17:56:00.00	11.503166	165.370537	9	0	Weapons Related	3.5 Mt	71
19:56:00.00	11.618730	162.314125	10	205	Weapons Related	190 tons	72
18:15:00.00	11.540100	162.357950	10	300	Weapons Related	14.9 kt	73
00:55:00.00	11.672427	162.210365	4	0	Weapons Related	13.7 kt	74
18:26:00.00	11.688500	165.390000	0	15	Weapons Related	365 kt	75
18:26:00.00	11.547200	162.352050	10	200	Weapons Related	8 kt	76
23:26:00.00	11.623857	162.318780	10	300	Weapons Related	1.49 kt	77
01:14:00.00	11.540150	162.356400	0	670	Weapons Related	1.7 kt	78
21:56:00.00	11.629300	162.285000	10	200	Weapons Related	15.2 kt	79
18:06:00.00	11.679000	165.391500	0	10	Weapons Related	1.1 Mt	80
18:06:00.00	11.627589	162.295691	10	300	Weapons Related	360 kt	81

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Redwing – Continued

82	Apache	07/08/1956	LLNL	Enewetak Atoll	----	Barge
83	Navajo	07/10/1956	LANL	Bikini Atoll	----	Barge
84	Tewa	07/20/1956	LLNL	Bikini Atoll	----	Barge
85	Huron	07/21/1956	LANL	Enewetak Atoll	----	Barge

Operation Plumbbob

86	Project 57 No. 1 Plutonium dispersal Test is also considered under Operation Project 57	04/24/1957	LANL/DoD	NTTR	----	Surface
87	Boltzmann	05/28/1957	LANL	NNSS	Area 7	Tower
88	Franklin	06/02/1957	LANL	NNSS	Area 3	Tower
89	Lassen Radioactivity not detected offsite	06/05/1957	LLNL	NNSS	Area 9	Balloon
90	Wilson	06/18/1957	LLNL	NNSS	Area 9	Balloon
91	Priscilla	06/24/1957	LANL/DoD	NNSS	Area 5	Balloon
92	Coulomb-A Radioactivity not detected offsite	07/01/1957	LANL	NNSS	Area 3	Surface
93	Hood Highest-yield NNSS atmospheric test	07/05/1957	LLNL	NNSS	Area 9	Balloon
94	Diablo	07/15/1957	LLNL	NNSS	Area 2	Tower
95	John W25 warhead on an air-to-air Genie rocket launched from an F-89J fighter aircraft	07/19/1957	LANL/DoD	NNSS	Area 10	Rocket
96	Kepler	07/24/1957	LANL	NNSS	Area 4	Tower
97	Owens	07/25/1957	LLNL	NNSS	Area 9	Balloon
98	Pascal-A Unstemmed hole (known as a Roman Candle test) First non-crater underground test on the NNSS	07/26/1957	LANL	NNSS	U3j	Shaft
99	Stokes	08/07/1957	LANL	NNSS	Area 7	Balloon
100	Saturn No radioactive release detected	08/10/1957	LLNL	NNSS	U12c.02	Tunnel
101	Shasta	08/18/1957	LLNL	NNSS	Area 2	Tower
102	Doppler	08/23/1957	LANL	NNSS	Area 7	Balloon
103	Pascal-B Unstemmed hole No radioactive release detected	08/27/1957	LANL	NNSS	U3d	Shaft
104	Franklin Prime	08/30/1957	LANL	NNSS	Area 7	Balloon
105	Smoky	08/31/1957	LLNL	NNSS	Area 8	Tower
106	Galileo	09/02/1957	LANL	NNSS	Area 1	Tower
107	Wheeler	09/06/1957	LLNL	NNSS	Area 9	Balloon

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Redwing – Continued

18:06:00.00	11.670900	162.199600	0	10	Weapons Related	1.85 Mt	82
17:56:00.00	11.679000	165.391500	0	15	Weapons Related	4.5 Mt	83
17:46:00.00	11.680000	165.341000	0	15	Weapons Related	5 Mt	84
18:16:00.00	11.677817	162.204974	0	15	Weapons Related	250 kt	85

Operation Plumbbob

14:27:00.00	37.319302	-115.906141	4,585	0	Safety Experiment	Zero	86
11:55:00.00	37.094825	-116.024500	4,235	500	Weapons Related	12 kt	87
11:55:00.00	37.095488	-116.103616	4,026	300	Weapons Related	140 tons	88
11:45:00.00	37.134742	-116.041648	4,230	500	Weapons Related	0.5 tons	89
11:45:00.00	37.134742	-116.041648	4,230	500	Weapons Related	10 kt	90
13:30:00.00	36.797923	-115.929776	3,076	700	Weapons Related	37 kt	91
17:30:00.00	37.041200	-116.026880	4,000	0	Safety Experiment	Zero	92
11:40:00.00	37.134742	-116.041648	4,230	1,500	Weapons Related	74 kt	93
11:30:00.00	37.150200	-116.109485	4,469	500	Weapons Related	17 kt	94
14:00:00.00	37.160350	-116.053805	4,280	14,830	Weapons Effects	About 2 kt	95
11:50:00.00	37.095488	-116.103616	4,309	500	Weapons Related	10 kt	96
13:30:00.00	37.134742	-116.041648	4,215	500	Weapons Related	9.7 kt	97
08:00:00.00	37.051722	-116.034289	4,033	-500	Safety Experiment	56 tons	98
12:25:00.00	37.086540	-116.024805	4,186	1,500	Weapons Related	19 kt	99
00:59:55.10	37.193818	-116.200738	7,061	-128	Safety Experiment	Zero	100
12:00:00.00	37.127880	-116.107280	4,387	500	Weapons Related	17 kt	101
12:00:00.00	37.086540	-116.024805	4,230	1,500	Weapons Related	11 kt	102
22:35:00.00	37.049000	-116.034810	4,028	-500	Safety Experiment	1 gram	103
12:40:00.00	37.086540	-116.024805	4,186	750	Weapons Related	4.7 kt	104
12:30:00.00	37.187200	-116.068670	4,479	700	Weapons Related	44 kt	105
12:40:00.00	37.053040	-116.103504	4,250	500	Weapons Related	11 kt	106
12:45:00.00	37.134742	-116.041648	4,230	500	Weapons Related	197 tons	107

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type	
Operation Plumbbob – Continued						
108	Coulomb-B	09/06/1957	LANL	NNSS	S3g	Surface
109	Laplace	09/08/1957	LANL	NNSS	Area 7	Balloon
110	Fizeau	09/14/1957	LANL	NNSS	Area 3	Tower
111	Newton	09/16/1957	LANL	NNSS	Area 7	Balloon
112	Rainier First detonation contained underground No radioactive release detected	09/19/1957	LLNL	NNSS	U12b	Tunnel
113	Whitney	09/23/1957	LLNL	NNSS	Area 2	Tower
114	Charleston	09/28/1957	LLNL	NNSS	Area 9	Balloon
115	Morgan	10/07/1957	LLNL	NNSS	Area 9	Balloon
Operation Project 58						
116	Pascal-C Unstemmed hole Radioactivity not detected offsite	12/06/1957	LANL	NNSS	U3e	Shaft
117	Coulomb-C	12/09/1957	LANL	NNSS	S3i	Surface
Operation Project 58A						
118	Venus No radioactive release detected	02/22/1958	LLNL	NNSS	U12d.01	Tunnel
119	Uranus No radioactive release detected	03/14/1958	LLNL	NNSS	U12c.01	Tunnel
Operation Hardtack I						
Note: Three DoD high altitude tests were conducted in the Pacific during Operation Hardtack I.						
120	Yucca Operation Newsreel High altitude - 86,000 ft	04/28/1958	LANL/DoD	Pacific	----	Balloon
121	Cactus	05/05/1958	LANL	Enewetak Atoll	----	Surface
122	Fir	05/11/1958	LLNL	Bikini Atoll	----	Barge
123	Butternut	05/11/1958	LANL	Enewetak Atoll	----	Barge
124	Koa	05/12/1958	LANL	Enewetak Atoll	----	Surface
125	Wahoo	05/16/1958	LANL/DoD	Enewetak Atoll	----	Underwater
126	Holly	05/20/1958	LANL	Enewetak Atoll	----	Barge
127	Nutmeg	05/21/1958	LLNL	Bikini Atoll	----	Barge
128	Yellowwood	05/26/1958	LANL	Enewetak Atoll	----	Barge
129	Magnolia	05/26/1958	LANL	Enewetak Atoll	----	Barge
130	Tobacco	05/30/1958	LANL	Enewetak Atoll	----	Barge
131	Sycamore	05/31/1958	LLNL	Bikini Atoll	----	Barge
132	Rose	06/02/1958	LANL	Enewetak Atoll	----	Barge
133	Umbrella	06/09/1958	LANL/DoD	Enewetak Atoll	----	Underwater
134	Maple	06/10/1958	LLNL	Bikini Atoll	----	Barge
135	Aspen	06/14/1958	LLNL	Bikini Atoll	----	Barge
136	Walnut	06/14/1958	LANL	Enewetak Atoll	----	Barge

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Plumbbob – Continued

20:05:00.00	37.042900	-116.027100	4,035	3	Safety Experiment	300 tons	108
13:00:00.00	37.086540	-116.024805	4,186	750	Weapons Related	1 kt	109
16:45:00.00	37.033430	-116.032243	4,030	500	Weapons Related	11 kt	110
12:50:00.00	37.086540	-116.024805	4,186	1,500	Weapons Related	12 kt	111
16:59:59.45	37.195732	-116.204029	7,515	-899	Weapons Related	1.7 kt	112
12:30:00.00	37.138372	-116.118258	4,486	500	Weapons Related	19 kt	113
13:00:00.00	37.134742	-116.041648	4,215	1,500	Weapons Related	12 kt	114
13:00:00.00	37.134742	-116.041648	4,214	500	Weapons Related	8 kt	115

Operation Project 58

22:15:00.00	37.049895	-116.031734	4,031	-250	Safety Experiment	38 tons	116
20:00:00.00	37.048200	-116.025200	4,050	0	Safety Experiment	500 tons	117

Operation Project 58A

01:00:00.00	37.193204	-116.201085	7,177	-100	Safety Experiment	1 gram	118
22:00:00.00	37.193818	-116.200738	6,751	-114	Safety Experiment	726 grams	119

Operation Hardtack I

These tests were conducted as Operation Newsreel

02:40:00.00	12.616667	163.016667	0	86,000	Weapons Effects	1.7 kt	120
18:15:00.00	11.697130	165.274200	5	3	Weapons Related	18 kt	121
17:50:00.00	11.697275	165.280000	0	10	Weapons Related	1.36 Mt	122
18:15:00.00	11.542700	162.338600	0	10	Weapons Related	81 kt	123
18:30:00.00	11.670990	162.198652	5	3	Weapons Related	1.37 Mt	124
01:30:00.00	11.343500	162.174900	0	-500	Weapons Effects	9 kt	125
18:30:00.00	11.537300	162.347400	0	13	Weapons Related	5.9 kt	126
21:20:00.00	11.503000	165.374000	0	12	Weapons Related	25.1 kt	127
02:00:00.00	11.659775	162.223408	0	11	Weapons Related	330 kt	128
18:00:00.00	11.535000	162.345000	0	14	Weapons Related	57 kt	129
02:15:00.00	11.691220	162.214650	0	10	Weapons Related	11.6 kt	130
03:00:00.00	11.697275	165.280000	0	12	Weapons Related	92 kt	131
18:45:00.00	11.532600	162.342600	0	15	Weapons Related	15 kt	132
23:15:00.00	11.378000	162.212000	0	-150	Weapons Effects	8 kt	133
17:30:00.00	11.693940	165.416375	0	12	Weapons Related	213 kt	134
17:30:00.00	11.697275	165.280000	0	11	Weapons Related	319 kt	135
18:30:00.00	11.684700	162.239850	0	7	Weapons Related	1.45 Mt	136

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Hardtack I – Continued

137	Linden	06/18/1958	LANL	Enewetak Atoll	----	Barge
138	Redwood	06/27/1958	LLNL	Bikini Atoll	----	Barge
139	Elder	06/27/1958	LANL	Enewetak Atoll	----	Barge
140	Oak	06/28/1958	LANL	Enewetak Atoll	----	Barge
141	Hickory	06/29/1958	LLNL	Bikini Atoll	----	Barge
142	Sequoia	07/01/1958	LANL	Enewetak Atoll	----	Barge
143	Cedar	07/02/1958	LLNL	Bikini Atoll	----	Barge
144	Dogwood	07/05/1958	LLNL	Enewetak Atoll	----	Barge
145	Poplar	07/12/1958	LLNL	Bikini Atoll	----	Barge
146	Scaevola	07/14/1958	LANL	Enewetak Atoll	----	Barge
147	Pisonia	07/17/1958	LANL	Enewetak Atoll	----	Barge
148	Juniper	07/22/1958	LLNL	Bikini Atoll	----	Barge
149	Olive	07/22/1958	LLNL	Enewetak Atoll	----	Barge
150	Pine	07/26/1958	LLNL	Enewetak Atoll	----	Barge
151	Teak Operation Newsreel High altitude – 77 kilometers	08/01/1958	LANL/DoD	Johnston Island area	----	Rocket
152	Quince	08/06/1958	LLNL/DoD	Enewetak Atoll	----	Surface
153	Orange Operation Newsreel High altitude – 43 kilometers	08/12/1958	LANL/DoD	Johnston Island area	----	Rocket
154	Fig	08/18/1958	LLNL/DoD	Enewetak Atoll	----	Surface

Operation Argus

155	Argus I About 300 miles altitude South 38.5 degrees, West 11.5 degrees	08/27/1958	LANL/DoD	South Atlantic	----	Rocket
156	Argus II About 300 miles altitude South 49.5 degrees, West 8.2 degrees	08/30/1958	LANL/DoD	South Atlantic	----	Rocket
157	Argus III About 300 miles altitude South 48.5 degrees, West 9.7 degrees	09/06/1958	LANL/DoD	South Atlantic	----	Rocket

Operation Hardtack II

158	Otero Unstemmed hole	09/12/1958	LANL	NNSS	U3q	Shaft
159	Bernalillo Unstemmed hole Radioactivity not detected offsite	09/17/1958	LANL	NNSS	U3n	Shaft
160	Eddy	09/19/1958	LANL	NNSS	Area 7	Balloon
161	Luna Unstemmed hole Radioactivity not detected offsite	09/21/1958	LANL	NNSS	U3m	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Hardtack I – Continued

03:00:00.00	11.608900	162.321300	0	8	Weapons Related	11 kt	137
17:30:00.00	11.693940	165.416375	0	11	Weapons Related	412 kt	138
18:30:00.00	11.677200	162.185255	0	9	Weapons Related	880 kt	139
19:30:00.00	11.605086	162.100486	0	6	Weapons Related	8.9 Mt	140
24:00:00.00	11.503000	165.374000	0	12	Weapons Related	14 kt	141
18:30:00.00	11.543050	162.347000	0	6	Weapons Related	5.2 kt	142
17:30:00.00	11.697275	165.280000	0	11	Weapons Related	220 kt	143
18:30:00.00	11.677570	162.206157	0	12	Weapons Related	397 kt	144
03:30:00.00	11.694458	165.265189	0	12	Weapons Related	9.3 Mt	145
04:00:00.00	11.550000	162.342500	0	20	Safety Experiment	Zero	146
23:00:00.00	11.541000	162.320000	0	6	Weapons Related	255 kt	147
04:20:00.00	11.503000	165.374000	0	12	Weapons Related	65 kt	148
20:30:00.00	11.678501	162.208073	0	8	Weapons Related	202 kt	149
20:30:00.00	11.651260	162.219650	0	8	Weapons Related	2 Mt	150
10:50:00.00	16.743889	-169.533333	0	252,000	Weapons Effects	3.8 Mt	151
02:15:00.00	11.545500	162.352700	10	3	Weapons Related	Zero	152
10:30:00.00	16.358333	-169.535556	0	141,000	Weapons Effects	3.8 Mt	153
04:00:00.00	11.545500	162.352700	10	2	Weapons Related	20 tons	154

Operation Argus

02:28:00.00	-38.800000	-10.900000	0	~300 miles	Weapons Effects	1.7 kt	155
02:28:00.00	-49.400000	-8.700000	0	~300 miles	Weapons Effects	1.7 kt	156
22:13:00.00	-49.500000	-10.450000	0	~300 miles	Weapons Effects	1.7 kt	157

Operation Hardtack II

20:00:00.00	37.049848	-116.032715	4,032	-480	Safety Experiment	38 tons	158
19:30:00.00	37.049512	-116.034010	4,028	-456	Safety Experiment	15 tons	159
14:00:00.00	37.086540	-116.024805	4,186	500	Weapons Related	83 tons	160
19:00:00.00	37.049193	-116.034571	4,028	-484	Safety Experiment	1.5 tons	161

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Hardtack II – Continued

162	Mercury No radioactive release detected	09/23/1958	LLNL	NNSS	U12f.01	Tunnel
163	Valencia Unstemmed hole Radioactivity not detected offsite	09/26/1958	LANL	NNSS	U3r	Shaft
164	Mars Slight venting Radioactivity not detected offsite	09/28/1958	LLNL	NNSS	U12f.02	Tunnel
165	Mora	09/29/1958	LANL	NNSS	Area 7	Balloon
166	Hidalgo	10/05/1958	LANL	NNSS	Area 7	Balloon
167	Colfax Unstemmed hole Radioactivity not detected offsite	10/05/1958	LANL	NNSS	U3k	Shaft
168	Tamalpais Slight venting Radioactivity not detected offsite	10/08/1958	LLNL	NNSS	U12b.02	Tunnel
169	Quay	10/10/1958	LANL	NNSS	Area 7	Tower
170	Lea	10/13/1958	LANL	NNSS	Area 7	Balloon
171	Neptune Slight venting Radioactivity not detected offsite	10/14/1958	LLNL	NNSS	U12c.03	Tunnel
172	Hamilton	10/15/1958	LLNL/DoD	NNSS	Area 5	Tower
173	Logan No radioactive release detected	10/16/1958	LLNL	NNSS	U12e.02	Tunnel
174	Dona Ana	10/16/1958	LANL	NNSS	Area 7	Balloon
175	Vesta Fired in surface structure	10/17/1958	LLNL	NNSS	S9e	Surface
176	Rio Arriba	10/18/1958	LANL	NNSS	Area 3	Tower
177	San Juan Unstemmed hole No radioactive release detected	10/20/1958	LANL	NNSS	U3p	Shaft
178	Socorro	10/22/1958	LANL	NNSS	Area 7	Balloon
179	Wrangell	10/22/1958	LLNL	NNSS	Area 5	Balloon
180	Oberon No radioactive release detected	10/22/1958	LLNL	NNSS	Area 8	Tower
181	Rushmore	10/22/1958	LLNL	NNSS	Area 9	Balloon
182	Catron	10/24/1958	LANL	NNSS	Area 3	Tower
183	Juno Fired in surface structure Radioactivity not detected offsite	10/24/1958	LLNL	NNSS	S9f	Surface
184	Ceres Radioactivity not detected offsite	10/26/1958	LLNL	NNSS	Area 8	Tower
185	Sanford	10/26/1958	LLNL	NNSS	Area 5	Balloon

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Hardtack II – Continued

22:00:00.00	37.193429	-116.201671	6,712	-183	Safety Experiment	1 gram	162
20:00:00.00	37.049538	-116.030696	4,029	-484	Safety Experiment	2 tons	163
00:00:00.00	37.193049	-116.201457	6,725	-125	Safety Experiment	13 tons	164
14:05:00.00	37.086540	-116.024805	4,186	1,500	Weapons Related	2 kt	165
14:10:00.00	37.086540	-116.024805	4,186	377	Safety Experiment	77 tons	166
16:15:00.00	37.048795	-116.035040	4,029	-350	Safety Experiment	5.5 tons	167
22:00:00.13	37.195257	-116.201330	7,019	-330	Weapons Related	72 tons	168
14:30:00.00	37.094825	-116.024500	4,249	100	Weapons Related	79 tons	169
13:20:00.00	37.086540	-116.024805	4,186	1,500	Weapons Related	1.4 kt	170
18:00:00.00	37.193809	-116.200563	7,530	-98	Safety Experiment	115 tons	171
16:00:00.00	36.802261	-115.933075	3,080	50	Weapons Related	1.2 tons	172
06:00:00.14	37.184127	-116.201996	7,071	-930	Weapons Related	5 kt	173
14:20:00.00	37.086540	-116.024805	4,186	450	Weapons Related	37 tons	174
23:00:00.00	37.122600	-116.035400	4,226	0	Safety Experiment	24 tons	175
14:25:00.00	37.040875	-116.026750	4,010	73	Weapons Related	90 tons	176
14:30:00.00	37.049734	-116.033384	4,029	-234	Safety Experiment	Zero	177
13:30:00.00	37.086540	-116.024805	1,450	1,450	Weapons Related	6 kt	178
16:50:00.00	36.797923	-115.929776	3,077	1,500	Weapons Related	115 tons	179
20:30:00.00	37.182847	-116.069270	4,446	25	Safety Experiment	Zero	180
23:40:00.00	37.134742	-116.041648	4,244	500	Weapons Related	188 tons	181
15:00:00.00	37.042800	-116.027800	4,026	73	Safety Experiment	21 tons	182
16:01:00.00	37.123250	-116.038650	4,210	0	Safety Experiment	1.7 tons	183
04:00:00.00	37.181329	-116.069535	4,428	25	Safety Experiment	0.7 tons	184
10:20:00.00	36.797923	-115.929776	3,077	1,500	Weapons Related	4.9 kt	185

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Hardtack II – Continued

186	De Baca	10/26/1958	LANL	NNSS	Area 7	Balloon
187	Chaves (Chavez)	10/27/1958	LANL	NNSS	Area 3	Tower
188	Evans Venting Radioactivity not detected offsite	10/29/1958	LLNL	NNSS	U12b.04	Tunnel
189	Mazama No radioactive release detected	10/29/1958	LLNL	NNSS	Area 9	Tower
190	Humboldt	10/29/1958	LLNL/DoD	NNSS	Area 3	Tower
191	Santa Fe	10/30/1958	LANL	NNSS	Area 7	Balloon
192	Ganymede Contained in surface structure No radioactive release detected	10/30/1958	LLNL	NNSS	S9g	Surface
193	Blanca Slight venting	10/30/1958	LLNL	NNSS	U12e.05	Tunnel
194	Titania	10/30/1958	LLNL	NNSS	Area 8	Tower

Operation Nougat

195	Antler Accidental release of radioactivity detected offsite	09/15/1961	LLNL	NNSS	U12e.03a	Tunnel
196	Shrew Accidental release of radioactivity detected onsite only	09/16/1961	LANL	NNSS	U3ac	Shaft
197	Boomer ☹ Accidental release of radioactivity detected onsite only	10/01/1961	LANL	NNSS	U3aa	Shaft
198	Chena Accidental release of radioactivity detected onsite only	10/10/1961	LLNL	NNSS	U12b.09	Tunnel
199	Mink ☹ First underground test to eventually result in a surface subsidence crater (years later) Accidental and drillback release of radioactivity detected onsite only	10/29/1961	LANL	NNSS	U3ae	Shaft
200	Fisher ☹ First surface subsidence crater to form at the NNSS Accidental and drillback release of radioactivity detected onsite only	12/03/1961	LANL	NNSS	U3ah	Shaft
201	Gnome Multiple-purpose experiment in salt Formed cavity 160–170 ft diameter, 60–80 ft high Accidental release of radioactivity detected offsite	12/10/1961	LLNL	near Carlsbad, New Mexico	----	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Hardtack II – Continued

16:00:00.00	37.086540	-116.024805	4,186	1,500	Weapons Related	2.2 kt	186
14:30:00.00	37.044600	-116.030650	4,025	52	Safety Experiment	0.6 tons	187
00:00:00.15	37.194804	-116.205604	7,472	-840	Weapons Related	55 tons	188
11:20:00.00	37.126459	-116.041931	4,202	50	Weapons Related	Zero	189
14:45:00.00	37.047565	-116.025425	4,029	25	Weapons Related	7.8 tons	190
03:00:00.00	37.086540	-116.024805	4,186	1,500	Weapons Related	1.3 kt	191
11:00:00.00	37.125587	-116.047855	4,193	0	Safety Experiment	Zero	192
15:00:00.15	37.185883	-116.202885	7,126	-987	Weapons Related	22 kt	193
20:34:00.00	37.177200	-116.070050	4,403	25	Safety Experiment	0.2 tons	194

Operation Nougat

17:00:00.12	37.187905	-116.208633	7,483	-1,319	Weapons Related	2.6 kt	195
19:45:00.12	37.048408	-116.033673	4,027	-322	Weapons Related	Low	196
21:30:00.12	37.048294	-116.035380	4,028	-330	Weapons Related	Low	197
18:00:00.13	37.194242	-116.207891	7,472	-838	Weapons Related	Low	198
18:30:00.13	37.048520	-116.031965	4,028	-630	Weapons Related	Low	199
23:04:59.63	37.045810	-116.028544	4,020	-1,193	Weapons Related	13.4 kt	200
19:00:00.00	32.263160	-103.866460	3,400	-1,184	Plowshare	3 kt	201

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Nougat – Continued

202	Mad Accidental release of radioactivity detected onsite only	12/13/1961	LLNL	NNSS	U9a	Shaft
203	Ringtail ◄ Accidental release of radioactivity detected onsite only	12/17/1961	LANL	NNSS	U3ak	Shaft
204	Feather Accidental release of radioactivity detected offsite	12/22/1961	LLNL	NNSS	U12b.08	Tunnel
205	Stoat ◄ Accidental and drillback release of radioactivity detected onsite only	01/09/1962	LANL	NNSS	U3ap	Shaft
206	Agouti ◄	01/18/1962	LANL	NNSS	U3ao	Shaft
207	Dormouse ◄ Drillback release of radioactivity detected onsite only	01/30/1962	LANL	NNSS	U3aq	Shaft
208	Stillwater ◄ Drillback release of radioactivity detected onsite only	02/08/1962	LLNL	NNSS	U9c	Shaft
209	Armadillo ◄ Accidental and drillback release of radioactivity detected onsite only	02/09/1962	LANL	NNSS	U3ar	Shaft
210	Hard Hat Accidental and drillback release of radioactivity detected onsite only	02/15/1962	LANL/DoD/ SNL	NNSS	U15a	Shaft
211	Chinchilla ◄ Accidental and drillback release of radioactivity detected onsite only	02/19/1962	LANL	NNSS	U3ag	Shaft
212	Codsaw ◄ Accidental release of radioactivity detected onsite only	02/19/1962	LLNL	NNSS	U9g	Shaft
213	Cimarron ◄ Drillback release of radioactivity detected onsite only	02/23/1962	LLNL	NNSS	U9h	Shaft
214	Platypus Accidental release of radioactivity detected onsite only	02/24/1962	LANL	NNSS	U3ad	Shaft
215	Pampas ◄ Accidental and drillback release of radioactivity detected offsite	03/01/1962	LANL/UK	NNSS	U3al	Shaft
216	Danny Boy Crater diameter 265 ft, depth 84 ft in basalt Radioactivity detected offsite	03/05/1962	LLNL/DoD	NNSS	U18a	Crater

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Nougat – Continued

18:00:00.16	37.126555	-116.049629	4,204	-596	Weapons Related	500 tons	202
16:35:00.13	37.043114	-116.026182	4,014	-1,191	Weapons Related	Low	203
16:30:00.13	37.194884	-116.209161	7,443	-812	Weapons Related	150 tons	204
16:30:00.14	37.044592	-116.035932	4,021	-992	Weapons Related	5.1 kt	205
18:00:00.13	37.047200	-116.035232	4,027	-856	Weapons Related	6.4 kt	206
18:00:00.13	37.046799	-116.040351	4,026	-1,191	Weapons Related	Low	207
18:00:00.16	37.127202	-116.053524	4,209	-595	Weapons Related	3.07 kt	208
16:30:00.13	37.043530	-116.039826	4,019	-786	Weapons Related	7.1 kt	209
18:00:00.10	37.226214	-116.060187	5,114	-943	Weapons Effects	5.7 kt	210
16:30:00.13	37.049006	-116.030398	4,030	-492	Weapons Related	1.9 kt	211
17:50:00.16	37.127406	-116.037989	4,217	-696	Weapons Related	Low	212
18:00:00.16	37.128808	-116.049178	4,208	-1,000	Weapons Related	11.9 kt	213
16:30:00.13	37.048288	-116.032772	4,026	-190	Weapons Related	Low	214
19:10:00.09	37.041217	-116.029549	4,012	-1,191	Joint US-UK	9.5 kt	215
18:15:00.12	37.111003	-116.365835	5,384	-110	Weapons Effects	430 tons	216

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Nougat – Continued

217	Ermine Drillback release of radioactivity detected onsite only	03/06/1962	LANL	NNSS	U3ab	Shaft
218	Brazos ☹ Accidental and drillback release of radioactivity detected onsite only	03/08/1962	LLNL	NNSS	U9d	Shaft
219	Hognose ☹ Drillback release of radioactivity detected onsite only	03/15/1962	LANL	NNSS	U3ai	Shaft
220	Hoosic ☹ Drillback release of radioactivity detected onsite only	03/28/1962	LLNL	NNSS	U9j	Shaft
221	Chinchilla II ☹ Accidental and drillback release of radioactivity detected onsite only	03/31/1962	LANL	NNSS	U3as	Shaft
222	Dormouse Prime ☹ Drillback release of radioactivity detected onsite only	04/05/1962	LANL	NNSS	U3az	Shaft
223	Passaic ☹ Drillback release of radioactivity detected onsite only	04/06/1962	LLNL	NNSS	U9l	Shaft
224	Hudson ☹ Drillback release of radioactivity detected onsite only	04/12/1962	LLNL	NNSS	U9n	Shaft
225	Platte Accidental release of radioactivity detected offsite	04/14/1962	LLNL	NNSS	U12k.01	Tunnel
226	Dead ☹ Drillback release of radioactivity detected onsite only	04/21/1962	LLNL	NNSS	U9k00	Shaft

Note: Tests that were conducted during 1962 in Christmas and Johnston Island areas,

227	Adobe Operation Dominic	04/25/1962	LANL	Christmas Island area	----	Airdrop
228	Aztec Operation Dominic	04/27/1962	LANL	Christmas Island area	----	Airdrop
229	Black ☹ Drillback release of radioactivity detected onsite only	04/27/1962	LLNL	NNSS	U9p	Shaft
230	Arkansas Operation Dominic	05/02/1962	LLNL	Christmas Island area	----	Airdrop
231	Questa Operation Dominic	05/04/1962	LANL	Christmas Island area	----	Airdrop

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Nougat – Continued

16:30:00.13	37.048350	-116.034526	4,028	-240	Safety Experiment	Low	217
18:00:00.21	37.122117	-116.049750	4,201	-840	Weapons Related	8.4 kt	218
16:30:00.13	37.043914	-116.031904	4,019	-788	Weapons Related	Low	219
18:00:00.16	37.124271	-116.034746	4,235	-614	Weapons Related	3.4 kt	220
18:00:00.13	37.046862	-116.037770	4,026	-448	Weapons Related	Low	221
18:00:00.13	37.044458	-116.024402	4,016	-856	Weapons Related	10.6 kt	222
18:00:00.16	37.117628	-116.044882	4,183	-766	Weapons Related	Low	223
18:00:00.16	37.127131	-116.045737	4,200	-495	Weapons Related	Low	224
18:00:00.13	37.221976	-116.158313	6,281	-631	Weapons Related	1.85 kt	225
18:40:00.16	37.118958	-116.032393	4,261	-635	Weapons Related	Low	226

and elsewhere in the Pacific, were conducted as part of Operation Dominic.

15:46:00.00	1.565000	-157.365000	0	2,900	Weapons Related	190 kt	227
16:02:00.00	1.565000	-157.365000	0	2,610	Weapons Related	410 kt	228
18:00:00.16	37.118411	-116.038640	4,217	-714	Weapons Related	Low	229
18:01:00.00	1.500000	-157.277000	0	5,030	Weapons Related	1.09 Mt	230
19:04:00.00	1.565000	-157.365000	0	5,230	Weapons Related	670 kt	231

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type	
Operation Nougat – Continued						
232	Frigate Bird Operation Dominic North 4 degrees 50 minutes, West 149 degrees 25 minutes 11,000 ft altitude W47 warhead on a Polaris A1 missile launched from the USS Ethan Allen (SSB-608) as part of the system proof test	05/06/1962	LLNL/DoD	Pacific	----	Rocket
233	Paca ☹ Accidental and drillback release of radioactivity detected onsite only	05/07/1962	LANL	NNSS	U3ax	Shaft
234	Yukon Operation Dominic	05/08/1962	LLNL	Christmas Island area	----	Airdrop
235	Mesilla Operation Dominic	05/09/1962	LANL	Christmas Island area	----	Airdrop
236	Arikaree ☹ Drillback release of radioactivity detected onsite only	05/10/1962	LLNL	NNSS	U9r	Shaft
237	Muskegon Operation Dominic	05/11/1962	LLNL	Christmas Island area	----	Airdrop
238	Swordfish Operation Dominic North 31 degrees 14 minutes, West 124 degrees 13 minutes Antisubmarine rocket (ASROC-W44) system proof test	05/11/1962	LANL/DoD	Pacific	----	Underwater
239	Encino Operation Dominic	05/12/1962	LANL	Christmas Island area	----	Airdrop
240	Aardvark ☹ Accidental and drillback release of radioactivity detected onsite only	05/12/1962	LANL	NNSS	U3amS	Shaft
241	Swanee Operation Dominic	05/14/1962	LLNL	Christmas Island area	----	Airdrop
242	Eel ☹ Accidental release of radioactivity detected offsite	05/19/1962	LLNL	NNSS	U9m	Shaft
243	Chetco Operation Dominic	05/19/1962	LLNL	Christmas Island area	----	Airdrop
244	White ☹ Drillback release of radioactivity detected onsite only	05/25/1962	LLNL	NNSS	U9b	Shaft
245	Tanana Operation Dominic	05/25/1962	LLNL	Christmas Island area	----	Airdrop

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Nougat – Continued

23:30:00.00	4.833333	-149.416667	0	11,000	Weapons Related	200 to 1,000 kt	232
19:33:00.14	37.046518	-116.025875	4,021	-848	Weapons Related	Low	233
18:01:00.00	1.565000	-157.365000	0	2,880	Weapons Related	100 kt	234
17:01:00.00	1.565000	-157.365000	0	2,450	Weapons Related	100 kt	235
15:00:00.16	37.127539	-116.049168	4,204	-546	Weapons Related	Low	236
15:37:00.00	1.565000	-157.365000	0	2,995	Weapons Related	50 kt	237
20:02:00.00	31.233333	-124.216667	0	----	Weapons Effects	Low	238
17:02:00.00	1.565000	-157.365000	0	5,510	Weapons Related	500 kt	239
19:00:00.10	37.065145	-116.031247	4,071	-1,424	Weapons Related	40 kt	240
15:21:00.00	1.570000	-157.365000	0	2,940	Weapons Related	97 kt	241
15:00:00.16	37.122589	-116.048079	4,200	-714	Weapons Related	4.5 kt	242
15:36:00.00	1.565000	-157.365000	0	6,945	Weapons Related	73 kt	243
15:00:00.15	37.124812	-116.052860	4,201	-632	Weapons Related	Low	244
16:08:00.00	1.550000	-157.350000	0	9,030	Weapons Related	2.6 kt	245

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Nougat – Continued

246	Nambe Operation Dominic	05/27/1962	LANL	Christmas Island area	----	Airdrop
247	Raccoon ☹	06/01/1962	LANL	NNSS	U3ajS	Shaft
248	Packrat ☹ Drillback release of radioactivity detected onsite only	06/06/1962	LANL	NNSS	U3aw	Shaft
249	Alma Operation Dominic	06/08/1962	LANL	Christmas Island area	----	Airdrop
250	Truckee Operation Dominic	06/09/1962	LLNL	Christmas Island area	----	Airdrop
251	Yeso Operation Dominic	06/10/1962	LANL	Christmas Island area	----	Airdrop
252	Harlem Operation Dominic	06/12/1962	LLNL	Christmas Island area	----	Airdrop
253	Des Moines Accidental release of radioactivity detected offsite	06/13/1962	LLNL	NNSS	U12j.01	Tunnel
254	Rinconada Operation Dominic	06/15/1962	LANL	Christmas Island area	----	Airdrop
255	Dulce Operation Dominic	06/17/1962	LANL	Christmas Island area	----	Airdrop
256	Petit Operation Dominic	06/19/1962	LLNL	Christmas Island area	----	Airdrop
257	Daman I ☹ Drillback release of radioactivity detected onsite only	06/21/1962	LANL	NNSS	U3be	Shaft
258	Otowi Operation Dominic	06/22/1962	LANL	Christmas Island area	----	Airdrop
259	Bighorn Operation Dominic	06/27/1962	LLNL	Christmas Island area	----	Airdrop
260	Haymaker ☹ Accidental and drillback release of radioactivity detected onsite only	06/27/1962	LANL	NNSS	U3auS	Shaft
261	Marshmallow Accidental release of radioactivity detected onsite only	06/28/1962	LLNL/DoD	NNSS	U16a	Tunnel
262	Bluestone Operation Dominic	06/30/1962	LLNL	Christmas Island area	----	Airdrop
263	Sacramento ☹ Drillback release of radioactivity detected onsite only	06/30/1962	LLNL	NNSS	U9v	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
Operation Nougat – Continued							
17:02:00.00	1.550000	-157.350000	0	7,140	Weapons Related	43 kt	246
17:00:00.14	37.045566	-116.035331	4,021	-539	Weapons Related	Low	247
17:00:00.12	37.045669	-116.040155	4,022	-860	Weapons Related	Low	248
17:02:00.00	1.380000	-157.195000	0	8,865	Weapons Related	782 kt	249
15:37:00.00	1.490000	-157.327000	0	6,970	Weapons Related	210 kt	250
16:01:00.00	1.380000	-157.195000	0	8,325	Weapons Related	3 Mt	251
15:37:00.00	1.470000	-157.195000	0	13,645	Weapons Related	1.2 Mt	252
21:00:00.12	37.222177	-116.163010	6,312	-660	Weapons Related	2.9 kt	253
16:00:00.00	1.470000	-157.195000	0	9,105	Weapons Related	800 kt	254
16:00:00.00	1.490000	-157.327000	0	9,090	Weapons Related	52 kt	255
15:01:00.00	1.470000	-157.320000	0	14,995	Weapons Related	2.2 kt	256
17:00:00.13	37.043017	-116.031123	4,016	-854	Weapons Related	Low	257
16:00:00.00	1.550000	-157.350000	0	9,011	Weapons Related	81.5 kt	258
15:19:00.00	1.230000	-157.220000	0	11,810	Weapons Related	7.65 Mt	259
18:00:00.12	37.041549	-116.036114	4,014	-1,340	Weapons Related	67 kt	260
17:00:00.11	37.009057	-116.201913	6,422	-1,020	Weapons Effects	Low	261
15:21:00.00	1.380000	-157.195000	0	4,980	Weapons Related	1.27 Mt	262
21:30:00.16	37.117366	-116.048287	4,177	-489	Weapons Related	Low	263

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type	
Operation Storax						
264	Sedan Excavation experiment Crater 1,280 ft diameter, 320 ft deep Thermonuclear device with fission yield less than 30% Radioactivity detected offsite	07/06/1962	LLNL	NNSS	U10h	Crater
Note: Four DoD weapons effects tests were conducted at the NNSS in July 1962.						
265	Little Feller II Operation Sunbeam Slightly above ground Test of Davy Crockett Test of the W54 nuclear weapon Radioactivity detected onsite only	07/07/1962	SNL/DoD	NNSS	Area 18	Surface
Note: Five DoD high-altitude weapons effects tests were conducted during Operation Dominic.						
266	Starfish Prime Operation Fishbowl High altitude - 250 miles	07/09/1962	LANL/DoD	Johnston Island area	----	Rocket
267	Sunset Operation Dominic	07/10/1962	LANL	Christmas Island area	----	Airdrop
268	Pamlico Operation Dominic	07/11/1962	LLNL	Christmas Island area	----	Airdrop
269	Johnnie Boy Operation Sunbeam Slightly below ground Radioactivity detected offsite	07/11/1962	LLNL/DoD	NNSS	U18j2	Crater
270	Merrimac ☹ Accidental and drillback release of radioactivity detected onsite only	07/13/1962	LLNL	NNSS	U3bd	Shaft
271	Small Boy Operation Sunbeam Slightly above ground With modern survey and GPS, it was discovered this test was actually conducted approximately 300 ft east of the Area 5 boundary; however, it is counted as an NNSS test Radioactivity detected offsite	07/14/1962	LANL/DoD	NNSS	Area 5	Tower
272	Little Feller I Operation Sunbeam Slightly above ground Test of Davy Crockett Test of the W54 nuclear weapon Last atmospheric test conducted at the NNSS Radioactivity detected offsite	07/17/1962	SNL/DoD	NNSS	Area 18	Surface

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Storax

17:00:00.15	37.176960	-116.046256	4,317	-635	Plowshare	104 kt	264
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These tests were conducted as Operation Sunbeam.

17:00:00.00	37.119142	-116.303697	5,136	3	Weapons Effects	Low	265
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These tests were conducted as Operation Fishbowl.

09:00:00.00	16.468422	-169.630075	0	250 miles	Weapons Effects	1.4 Mt	266
16:33:00.00	1.520000	-157.280000	0	5,000	Weapons Related	1 Mt	267
15:37:00.00	1.230000	-157.180000	0	14,330	Weapons Related	3.88 Mt	268
16:45:00.09	37.112150	-116.333947	5,066	-23	Weapons Effects	500 tons	269
16:00:00.15	37.055018	-116.034262	4,041	-1,356	Weapons Related	Intermediate	270
18:30:00.00	36.802465	-115.925910	3,078	10	Weapons Effects	Low	271
17:00:00.00	37.109551	-116.318154	5,178	3	Weapons Effects	Low	272

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Storax – Continued

273	Wichita ☹ Accidental release of radioactivity detected onsite only	07/27/1962	LLNL	NNSS	U9y	Shaft
274	York ☹ Drillback release of radioactivity detected onsite only	08/24/1962	LLNL	NNSS	U9z	Shaft
275	Bobac ☹ Drillback release of radioactivity detected onsite only	08/24/1962	LANL	NNSS	U3bl	Shaft
276	Raritan ☹ Drillback release of radioactivity detected onsite only	09/06/1962	LLNL	NNSS	U9u	Shaft
277	Hyrax ☹ Drillback release of radioactivity detected onsite only	09/14/1962	LANL	NNSS	U3bh	Shaft
278	Peba ☹	09/20/1962	LANL	NNSS	U3bb	Shaft
279	Allegheny ☹ Accidental and drillback release of radioactivity detected onsite only	09/29/1962	LLNL	NNSS	U9x	Shaft
280	Androscoggin Operation Dominic	10/02/1962	LLNL	Johnston Island area	- - - -	Airdrop
281	Mississippi ☹ Drillback release of radioactivity detected onsite only	10/05/1962	LLNL	NNSS	U9ad	Shaft
282	Bumping Operation Dominic	10/06/1962	LLNL	Johnston Island area	- - - -	Airdrop
283	Roanoke ☹ Accidental and drillback release of radioactivity detected onsite only	10/12/1962	LLNL	NNSS	U9q	Shaft
284	Wolverine Accidental release of radioactivity detected onsite only	10/12/1962	LANL	NNSS	U3av	Shaft
285	Tioga	10/18/1962	LLNL	NNSS	U9f	Shaft
286	Chama Operation Dominic	10/18/1962	LANL	Johnston Island area	- - - -	Airdrop
287	Bandicoot ☹ Accidental release of radioactivity detected offsite	10/19/1962	LANL	NNSS	U3bj	Shaft
288	Checkmate Operation Fishbowl High altitude – tens of miles	10/20/1962	LANL/DoD	Johnston Island area	- - - -	Rocket
289	Bluegill 3 Prime Operation Fishbowl High altitude – tens of miles	10/26/1962	LANL/DoD	Johnston Island area	- - - -	Rocket

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Storax – Continued

21:00:00.16	37.129666	-116.057353	4,239	-493	Weapons Related	Low	273
15:00:00.15	37.118588	-116.040353	4,208	-743	Weapons Related	Low	274
17:00:00.13	37.046097	-116.024707	4,021	-676	Weapons Related	Low	275
17:00:00.20	37.130265	-116.045605	4,204	-513	Weapons Related	Low	276
17:10:00.12	37.043888	-116.021981	4,017	-711	Weapons Related	Low	277
17:00:00.12	37.054996	-116.030153	4,043	-792	Weapons Related	Low	278
17:00:00.15	37.116630	-116.033647	4,258	-692	Weapons Related	Low	279
16:18:00.00	13.830000	-172.083000	0	10,260	Weapons Related	75 kt	280
17:00:00.16	37.139355	-116.051195	4,234	-1,622	Weapons Related	115 kt	281
16:03:00.00	14.670000	-168.250000	0	9,900	Weapons Related	11.3 kt	282
15:00:00.16	37.122688	-116.051680	4,198	-580	Weapons Related	Low	283
17:00:00.12	37.048734	-116.033427	4,027	-241	Weapons Related	Low	284
15:00:00.15	37.128502	-116.041116	4,203	-195	Weapons Related	Low	285
16:01:00.00	14.670000	-168.750000	0	11,970	Weapons Related	1.59 Mt	286
18:00:00.08	37.039493	-116.022015	4,008	-792	Weapons Related	12.5 kt	287
08:30:00.00	16.072381	-169.609986	0	tens of miles	Weapons Effects	Low	288
09:59:00.00	16.468422	-169.630075	0	tens of miles	Weapons Effects	Submegaton	289

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type	
Operation Storax – Continued						
290	Santee ◄ Drillback release of radioactivity detected onsite only	10/27/1962	LLNL	NNSS	U10f	Shaft
291	Calamity Operation Dominic	10/27/1962	LLNL	Johnston Island area	----	Airdrop
292	Housatonic Operation Dominic	10/30/1962	LLNL	Johnston Island area	----	Airdrop
293	Kingfish Operation Fishbowl High altitude – tens of miles	11/01/1962	LANL/DoD	Johnston Island area	----	Rocket
294	Tightrope Operation Fishbowl High altitude – tens of miles	11/04/1962	LANL/DoD	Johnston Island area	----	Rocket
295	St. Lawrence Accidental and drillback release of radioactivity detected onsite only	11/09/1962	LLNL	NNSS	U2b	Shaft
296	Gundi ◄	11/15/1962	LANL	NNSS	U3bm	Shaft
297	Anacostia ◄ Device development Accidental and drillback release of radioactivity detected onsite only	11/27/1962	LLNL	NNSS	U9i	Shaft
298	Taunton ◄ Drillback release of radioactivity detected onsite only	12/04/1962	LLNL	NNSS	U9aa	Shaft
299	Tendrac ◄	12/07/1962	LANL/UK	NNSS	U3ba	Shaft
300	Madison Drillback release of radioactivity detected onsite only	12/12/1962	LLNL	NNSS	U12g.01	Tunnel
301	Numbat ◄ Drillback release of radioactivity detected onsite only	12/12/1962	LANL	NNSS	U3bu	Shaft
302	Manatee Drillback release of radioactivity detected onsite only	12/14/1962	LLNL	NNSS	U9af	Shaft
303	Casselman ◄ Drillback release of radioactivity detected onsite only	02/08/1963	LLNL	NNSS	U10g	Shaft
304	Hatchie	02/08/1963	LLNL	NNSS	U9e	Shaft
305	Ferret	02/08/1963	LANL	NNSS	U3bf	Shaft
306	Acushi ◄	02/08/1963	LANL	NNSS	U3bg	Shaft
307	Chipmunk	02/15/1963	LANL	NNSS	U3ay	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
Operation Storax – Continued							
15:00:00.15	37.149260	-116.054375	4,254	-1,048	Weapons Related	Low	290
15:46:00.00	14.700000	-168.417000	0	11,780	Weapons Related	800 kt	291
16:01:00.00	13.613333	-172.216667	0	12,130	Weapons Related	8.3 Mt	292
12:10:00.00	16.113503	-169.680561	0	tens of miles	Weapons Effects	Submegaton	293
07:30:00.00	16.707419	-169.542406	0	tens of miles	Weapons Effects	Low	294
18:00:00.16	37.163767	-116.074164	4,384	-546	Weapons Related	Low	295
16:30:00.08	37.041705	-116.024740	4,010	-792	Weapons Related	Low	296
18:00:00.14	37.122762	-116.029888	4,268	-747	Plowshare	5.2 kt	297
16:00:00.15	37.128037	-116.050875	4,209	-749	Weapons Related	Low	298
19:00:00.10	37.051697	-116.030177	4,033	-993	Joint US-UK	Low	299
17:25:00.12	37.168631	-116.206954	7,477	-1,320	Weapons Related	Low	300
18:45:00.12	37.046058	-116.016476	4,030	-761	Weapons Related	Low	301
18:00:00.16	37.124194	-116.040829	4,202	-196	Weapons Related	Low	302
16:00:00.16	37.148826	-116.052745	4,247	-994	Weapons Related	Low	303
16:00:01.15	37.125912	-116.039518	4,208	-200	Weapons Related	Low	304
18:30:00.13	37.058292	-116.030132	4,052	-1,069	Weapons Related	Low	305
18:30:00.14	37.046085	-116.021966	4,022	-856	Weapons Related	Low	306
17:00:00.13	37.048966	-116.032619	4,028	-195	Safety Experiment	Low	307

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Storax – Continued

308	Kaweah ☹ Device development Drillback release of radioactivity detected onsite only	02/21/1963	LLNL	NNSS	U9ab	Shaft
309	Carmel ☹ Drillback release of radioactivity detected onsite only	02/21/1963	LLNL	NNSS	U2h	Shaft
310	Jerboa ☹	03/01/1963	LANL	NNSS	U3at	Shaft
311	Toyah ☹ Drillback release of radioactivity detected onsite only	03/15/1963	LLNL	NNSS	U9ac	Shaft
312	Gerbil ☹	03/29/1963	LANL	NNSS	U3bp	Shaft
313	Ferret Prime ☹	04/05/1963	LANL	NNSS	U3by	Shaft
314	Coypu	04/10/1963	LANL	NNSS	U3af	Shaft
315	Cumberland ☹ Drillback release of radioactivity detected onsite only	04/11/1963	LLNL	NNSS	U2e	Shaft
316	Kootanai ☹ Accidental and drillback release of radioactivity detected onsite only	04/24/1963	LLNL	NNSS	U9w	Shaft
317	Paisano ☹ Accidental release of radioactivity detected onsite only	04/24/1963	LLNL	NNSS	U9w1	Shaft
318	Gundi Prime ☹	05/09/1963	LANL	NNSS	U3db	Shaft

Note: Four storage-transportation tests were conducted on the Nevada Test and Training Range.

319	Double Tracks Operation Roller Coaster (Storage-Transportation) Plutonium dispersal Radioactivity detected outside withdrawn land off the NTTR	05/15/1963	LANL/DoD/UK	NTTR	----	Surface
320	Harkee ☹	05/17/1963	LANL	NNSS	U3bv	Shaft
321	Tejon	05/17/1963	LANL	NNSS	U3cg	Shaft
322	Stones ☹ Drillback release of radioactivity detected onsite only	05/22/1963	LANL	NNSS	U9ae	Shaft
323	Clean Slate I Operation Roller Coaster (Storage-Transportation) Plutonium dispersal Radioactivity detected outside withdrawn land off the NTTR	05/25/1963	LANL/DoD/UK	NTTR	----	Surface
324	Pleasant ☹ Accidental and drillback release of radioactivity detected onsite only	05/29/1963	LLNL	NNSS	U9ah	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Storax – Continued

19:47:00.14	37.120269	-116.046582	4,187	-745	Plowshare	3 kt	308
19:47:08.63	37.154760	-116.080754	4,390	-536	Weapons Related	Low	309
19:00:00.12	37.044463	-116.027363	4,016	-988	Weapons Related	Low	310
16:22:53.14	37.125782	-116.045645	4,197	-429	Weapons Related	Low	311
15:49:00.12	37.041675	-116.019265	4,012	-917	Weapons Related	Low	312
17:52:00.13	37.037310	-116.024781	4,002	-792	Weapons Related	Low	313
16:01:30.12	37.048763	-116.031182	4,028	-245	Safety Experiment	Low	314
16:03:00.16	37.156630	-116.071834	4,352	-745	Weapons Related	Low	315
16:09:30.14	37.120549	-116.037147	4,225	-597	Weapons Related	Low	316
16:09:30.14	37.120479	-116.037045	4,225	-190	Weapons Related	Low	317
18:19:00.00	37.049351	-116.016455	4,043	-892	Weapons Related	Low	318

These tests were conducted during May and June 1963 as the joint US-UK Operation Roller Coaster.

09:55:00.00	37.706091	-116.988191	4,972	1	Joint US-UK	Zero	319
14:55:00.00	37.043860	-116.016502	4,022	-792	Weapons Related	Low	320
14:55:00.00	37.048291	-116.033225	4,026	-245	Safety Experiment	Low	321
15:40:00.14	37.111002	-116.039936	4,213	-1,290	Weapons Related	Intermediate	322
11:17:00.00	37.708495	-116.657860	5,380	1	Joint US-UK	Zero	323
15:03:30.16	37.128027	-116.044289	4,198	-692	Weapons Related	Low	324

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type	
Operation Storax – Continued						
325	Clean Slate II Operation Roller Coaster (Storage-Transportation) Plutonium dispersal Radioactivity not detected outside withdrawn land off the NTTR	05/31/1963	LANL/DoD/UK	NTTR	----	Surface
326	Yuba Accidental release of radioactivity detected onsite only Accidental and drillback release of radioactivity detected offsite	06/05/1963	LLNL	NNSS	U12b.10	Tunnel
327	Hutia ☹	06/06/1963	LANL	NNSS	U3bc	Shaft
328	Apshapa Accidental and drillback release of radioactivity detected onsite only	06/06/1963	LLNL	NNSS	U9ai	Shaft
329	Clean Slate III Last atmospheric test conducted by the United States Operation Roller Coaster (Storage-Transportation) Plutonium dispersal Radioactivity detected outside withdrawn land off the NTTR	06/09/1963	LANL/DoD/UK	NTTR	----	Surface
330	Mataco ☹	06/14/1963	LANL	NNSS	U3bk	Shaft
331	Kennebec ☹ Accidental and drillback release of radioactivity detected onsite only	06/25/1963	LLNL	NNSS	U2af	Shaft
Operation Niblick						
332	Pekan ☹ Drillback release of radioactivity detected onsite only	08/12/1963	LANL	NNSS	U3bw	Shaft
333	Satsop ☹	08/15/1963	LLNL	NNSS	U2g	Shaft
334	Kohocton Natches Simultaneous, separate holes Kohocton: Drillback release of radioactivity detected onsite only	08/23/1963 08/23/1963	LLNL LLNL	NNSS NNSS	U9ak U9ak1	Shaft Shaft
335	Ahtanum ☹ Drillback release of radioactivity detected onsite only	09/13/1963	LLNL	NNSS	U2l	Shaft
336	Bilby ☹ First underground test reported felt in Las Vegas, Nevada Drillback release of radioactivity detected onsite only	09/13/1963	LANL	NNSS	U3cn	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Storax – Continued

10:47:00.00	37.761125	-116.614428	5,390	1	Joint US-UK	Zero	325
17:00:00.12	37.196527	-116.210043	7,438	-796	Weapons Related	3.1 kt	326
14:00:00.13	37.044236	-116.037230	4,019	-442	Weapons Related	Low	327
16:58:00.15	37.124606	-116.040853	4,204	-292	Weapons Related	Low	328
10:33:00.00	37.759156	-116.681135	5,387	1	Joint US-UK	Zero	329
14:10:00.13	37.046073	-116.019218	4,026	-642	Weapons Related	Low	330
23:00:00.15	37.131351	-116.068934	4,275	-742	Weapons Related	Low	331

Operation Niblick

23:45:00.13	37.041660	-116.016517	4,015	-992	Weapons Related	Low	332
13:00:00.15	37.154044	-116.077499	4,373	-738	Weapons Related	Low	333
13:20:00.14 13:20:00.15	37.124914 37.124913	-116.036257 -116.036120	4,267 4,227	-836 -194	Weapons Related Weapons Related	Low Low	334
13:53:00.15	37.163323	-116.081512	4,419	-742	Weapons Related	Low	335
17:00:00.13	37.060371	-116.022530	4,074	-2,344	Weapons Related	249 kt	336

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Niblick – Continued

337	Carp Accidental and drillback release of radioactivity detected onsite only	09/27/1963	LANL	NNSS	U3cb	Shaft
338	Narraguagus Drillback release of radioactivity detected onsite only	09/27/1963	LLNL	NNSS	U2f	Shaft
339	Grunion ▼ Drillback release of radioactivity detected onsite only	10/11/1963	LANL	NNSS	U3bz	Shaft
340	Tornillo ▼ Device development Drillback release of radioactivity detected onsite only	10/11/1963	LLNL	NNSS	U9aq	Shaft
341	Clearwater Drillback release of radioactivity detected onsite only	10/16/1963	LLNL	NNSS	U12q	Shaft
342	Mullet	10/17/1963	LLNL	NNSS	U2ag	Shaft
343	Shoal Nuclear test detection-research experiment Drillback release of radioactivity detected onsite only	10/26/1963	LANL/DoD	near Fallon, Nevada	- - - -	Shaft
344	Anchovy ▼ Accidental and drillback release of radioactivity detected onsite only	11/14/1963	LANL	NNSS	U3bq	Shaft
345	Mustang ▼ Drillback release of radioactivity detected onsite only	11/15/1963	LLNL	NNSS	U9at	Shaft
346	Greys ▼ Drillback release of radioactivity detected onsite only	11/22/1963	LLNL	NNSS	U9ax	Shaft
347	Barracuda Sardine ▼ Simultaneous, separate holes Barracuda, Sardine: Accidental and drillback release of radioactivity detected onsite only	12/04/1963 12/04/1963	LANL LANL	NNSS NNSS	U3cr U3ch	Shaft Shaft
348	Eagle ▼ Accidental and drillback release of radioactivity detected offsite	12/12/1963	LLNL	NNSS	U9av	Shaft
349	Tuna Accidental release of radioactivity detected onsite only	12/20/1963	LANL	NNSS	U3de	Shaft
350	Fore ▼ Drillback release of radioactivity detected onsite only	01/16/1964	LLNL	NNSS	U9ao	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Niblick – Continued

14:20:00.13	37.037266	-116.016562	4,002	-1,081	Weapons Related	Low	337
17:30:00.15	37.154731	-116.074231	4,360	-493	Weapons Related	Low	338
14:00:00.11	37.037296	-116.022040	4,002	-857	Weapons Related	Low	339
21:00:00.16	37.118693	-116.034731	4,244	-491	Plowshare	380 tons	340
17:00:00.14	37.198125	-116.230391	7,414	-1,788	Weapons Related	Intermediate	341
15:00:00.15	37.130761	-116.067831	4,270	-198	Safety Experiment	Low	342
17:00:00.10	39.200060	-118.381210	5,250	-1,211	Vela Uniform	12 kt	343
16:00:00.12	37.039478	-116.019280	4,007	-854	Weapons Related	Low	344
15:00:00.15	37.132248	-116.047757	4,212	-544	Weapons Related	Low	345
17:30:00.15	37.119274	-116.046042	4,182	-988	Weapons Related	Intermediate	346
16:38:30.13 16:38:30.13	37.043839 37.039537	-116.013076 -116.030248	4,031 4,007	-864 -860	Weapons Related Weapons Related	Low Low	347
16:02:00.15	37.130971	-116.044749	4,203	-541	Weapons Related	5.3 kt	348
15:24:00.13	37.052743	-116.034247	4,035	-1,359	Weapons Related	Low	349
16:00:00.15	37.142233	-116.049975	4,231	-1,611	Weapons Related	20 to 200 kt	350

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Niblick – Continued

351	Oconto ▾ Drillback release of radioactivity detected offsite by aircraft only	01/23/1964	LLNL	NNSS	U9ay	Shaft
352	Club ▾ Accidental and drillback release of radioactivity detected onsite only	01/30/1964	LLNL	NNSS	U2aa	Shaft
353	Solendon ▾ Accidental release of radioactivity detected onsite only	02/12/1964	LANL	NNSS	U3cz	Shaft
354	Bunker ▾ Accidental and drillback release of radioactivity detected onsite only	02/13/1964	LLNL	NNSS	U9bb	Shaft
355	Bonefish ▾ Drillback release of radioactivity detected onsite only	02/18/1964	LANL	NNSS	U3bt	Shaft
356	Mackerel	02/18/1964	LANL	NNSS	U4b	Shaft
357	Klickitat ▾ Device development Drillback release of radioactivity detected onsite only	02/20/1964	LLNL	NNSS	U10e	Shaft
358	Handicap ▾ Accidental and drillback release of radioactivity detected onsite only	03/12/1964	LLNL	NNSS	U9ba	Shaft
359	Pike ▾ Accidental release of radioactivity detected offsite	03/13/1964	LANL	NNSS	U3cy	Shaft
360	Hook ▾ Accidental and drillback release of radioactivity detected onsite only	04/14/1964	LLNL	NNSS	U9bc	Shaft
361	Sturgeon ▾ Drillback release of radioactivity detected onsite only	04/15/1964	LANL	NNSS	U3bo	Shaft
362	Bogey Accidental and drillback release of radioactivity detected onsite only	04/17/1964	LLNL	NNSS	U9au	Shaft
363	Turf ▾ Drillback release of radioactivity detected onsite only	04/24/1964	LLNL	NNSS	U10c	Shaft
364	Pipefish ▾ Accidental release of radioactivity detected onsite only	04/29/1964	LANL	NNSS	U3co	Shaft
365	Driver Accidental and drillback release of radioactivity detected onsite only	05/07/1964	LLNL	NNSS	U9ar	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Niblick – Continued

16:00:00.15	37.126372	-116.037164	4,221	-868	Weapons Related	10.5 kt	351
16:00:00.15	37.136163	-116.071528	4,296	-592	Weapons Related	Less than 20 kt	352
15:38:00.12	37.056564	-116.030109	4,046	-493	Weapons Related	Less than 20 kt	353
15:30:00.15	37.131968	-116.033210	4,254	-743	Weapons Related	Less than 20 kt	354
15:37:19.12	37.059338	-116.034192	4,050	-987	Weapons Related	Less than 20 kt	355
15:37:37.12	37.095580	-116.051591	4,145	-1,095	Weapons Related	Less than 20 kt	356
15:30:00.15	37.150838	-116.040983	4,266	-1,613	Plowshare	70 kt	357
15:00:00.01	37.129888	-116.037207	4,225	-471	Weapons Related	Less than 20 kt	358
16:02:00.12	37.050421	-116.012330	4,060	-376	Weapons Related	Less than 20 kt	359
14:40:00.15	37.128878	-116.030698	4,274	-670	Weapons Related	Less than 20 kt	360
14:30:00.12	37.043873	-116.019236	4,019	-491	Weapons Related	Less than 20 kt	361
15:29:52.28	37.119437	-116.034762	4,238	-391	Weapons Related	Less than 20 kt	362
20:10:00.15	37.149544	-116.056260	4,322	-1,661	Weapons Related	20 to 200 kt	363
20:47:00.12	37.039520	-116.027503	4,006	-859	Weapons Related	Less than 20 kt	364
13:00:00.15	37.120213	-116.041167	4,200	-486	Weapons Related	Less than 20 kt	365

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Niblick – Continued

366	Backswing ☹ Accidental and drillback release of radioactivity detected onsite only	05/14/1964	LLNL	NNSS	U9aw	Shaft
367	Minnow ☹	05/15/1964	LANL	NNSS	U3cv	Shaft
368	Ace ☹ Device development Accidental and drillback release of radioactivity detected onsite only	06/11/1964	LLNL	NNSS	U2n	Shaft
369	Bitterling ☹	06/12/1964	LANL	NNSS	U3cu	Shaft
370	Duffer ☹ Drillback release of radioactivity detected onsite only	06/18/1964	LLNL	NNSS	U10dS	Shaft
371	Fade ☹ Accidental and drillback release of radioactivity detected onsite only	06/25/1964	LLNL	NNSS	U9be	Shaft
372	Dub ☹ Device development Accidental and drillback release of radioactivity detected onsite only	06/30/1964	LLNL	NNSS	U10a	Shaft

Operation Whetstone

373	Bye ☹ Drillback release of radioactivity detected onsite only	07/16/1964	LLNL	NNSS	U10i	Shaft
374	Cormorant Accidental and drillback release of radioactivity detected onsite only	07/17/1964	LANL/UK	NNSS	U3df	Shaft
375	Links Accidental and drillback release of radioactivity detected onsite only	07/23/1964	LLNL	NNSS	U9bf	Shaft
376	Trogon	07/24/1964	LANL	NNSS	U3dj	Shaft
377	Alva ☹ Accidental and drillback release of radioactivity detected offsite by aircraft only	08/19/1964	LLNL	NNSS	U2j	Shaft
378	Canvasback Drillback release of radioactivity detected onsite only	08/22/1964	LANL	NNSS	U3cp	Shaft
379	Player	08/27/1964	LLNL	NNSS	U9cc	Shaft
380	Haddock	08/28/1964	LANL	NNSS	U3dl	Shaft
381	Guanay ☹	09/04/1964	LANL	NNSS	U3di	Shaft
382	Spoon ☹ Drillback release of radioactivity detected onsite only	09/11/1964	LLNL	NNSS	U9bd	Shaft
383	Courser	09/25/1964	LANL/UK	NNSS	U3do	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Niblick – Continued

14:40:00.15	37.117305	-116.039815	4,213	-536	Weapons Related	Less than 20 kt	366
16:15:00.12	37.041639	-116.013094	4,022	-792	Weapons Related	Less than 20 kt	367
16:45:00.15	37.148555	-116.076866	4,353	-874	Plowshare	3 kt	368
14:01:00.10	37.038898	-116.013121	4,039	-632	Weapons Related	Less than 20 kt	369
13:30:00.20	37.165947	-116.039283	4,312	-1,466	Weapons Related	Less than 20 kt	370
13:30:00.14	37.111087	-116.029646	4,288	-673	Weapons Related	Less than 20 kt	371
13:33:00.14	37.174380	-116.057265	4,293	-848	Plowshare	11.7 kt	372

Operation Whetstone

13:15:00.15	37.182162	-116.046217	4,335	-1,282	Weapons Related	20 to 200 kt	373
17:18:30.03	37.017564	-116.030428	3,975	-891	Joint US-UK	Less than 20 kt	374
13:30:00.15	37.113711	-116.032882	4,265	-395	Weapons Related	Less than 20 kt	375
18:30:00.04	37.046036	-116.013053	4,039	-633	Weapons Related	Less than 20 kt	376
16:00:00.14	37.158968	-116.083968	4,420	-545	Weapons Related	4.4 kt	377
22:17:00.06	37.065281	-116.016319	4,113	-1,469	Weapons Related	Less than 20 kt	378
14:30:00.15	37.117311	-116.041530	4,201	-296	Safety Experiment	Less than 20 kt	379
17:06:00.04	37.066970	-116.023153	4,097	-1,193	Weapons Related	Less than 20 kt	380
18:15:00.08	37.017527	-116.023574	3,975	-856	Weapons Related	Less than 20 kt	381
14:00:00.10	37.113676	-116.026366	4,316	-590	Weapons Related	Less than 20 kt	382
17:02:00.03	37.072423	-116.016258	4,148	-1,178	Joint US-UK	Zero	383

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Whetstone – Continued

384	Auk	10/02/1964	LANL	NNSS	U7b	Shaft
385	Par Isotope production and explosive development Drillback release of radioactivity detected onsite only	10/09/1964	LLNL	NNSS	U2p	Shaft
386	Turnstone Barbel Simultaneous, separate holes Barbel: Drillback release of radioactivity detected onsite only	10/16/1964 10/16/1964	LANL LANL	NNSS NNSS	U3dt U3bx	Shaft Shaft
387	Salmon Nuclear test detection research experiment	10/22/1964	LLNL/DoD	near Hattiesburg, Mississippi	- - - -	Shaft
388	Garden	10/23/1964	LLNL	NNSS	U9aj	Shaft
389	Forest Drillback release of radioactivity detected onsite only	10/31/1964	LLNL	NNSS	U7a	Shaft
390	Handcar Effects of contained explosion in carbonate rock Accidental and drillback release of radioactivity detected onsite only	11/05/1964	LLNL	NNSS	U10b	Shaft
391	Crepe Drillback release of radioactivity detected onsite only	12/05/1964	LLNL	NNSS	U2q	Shaft
392	Drill (Source-Lower) Drill (Target-Upper) Simultaneous, same hole Drill (Source-Lower): Accidental and drillback release of radioactivity detected offsite	12/05/1964 12/05/1964	LLNL LLNL	NNSS NNSS	U2ai U2ai	Shaft Shaft
393	Parrot Accidental release of radioactivity detected offsite	12/16/1964	LANL	NNSS	U3dk	Shaft
394	Cassowary Hoopoe Simultaneous, separate holes	12/16/1964 12/16/1964	LANL LANL	NNSS NNSS	U3bn U3cf	Shaft Shaft
395	Mudpack Drillback release of radioactivity detected onsite only	12/16/1964	LLNL/DoD	NNSS	U10n	Shaft
396	Sulky Excavation test of explosive buried at greater depth than crater-type tests in relation to yield Produced mound of broken rock (a "retarc") Radioactivity detected offsite	12/18/1964	LLNL	NNSS	U18d	Shaft

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Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Whetstone – Continued

20:03:00.04	37.077878	-116.009355	4,203	-1,484	Weapons Related	Less than 20 kt	384
14:00:00.12	37.151301	-116.077864	4,368	-1,331	Plowshare	38 kt	385
15:59:30.03 15:59:30.04	37.033470 37.033946	-116.025670 -116.016539	3,996 4,007	-412 -849	Weapons Related Weapons Related	Less than 20 kt Less than 20 kt	386
16:00:00.00	31.142300	-89.570000	265	-2,710	Vela Uniform	5.3 kt	387
15:00:00.94	37.116986	-116.032018	4,269	-491	Weapons Related	Less than 20 kt	388
17:04:58.61	37.107161	-116.033112	4,255	-1,269	Weapons Related	Less than 20 kt	389
15:00:00.11	37.174324	-116.067903	4,375	-1,322	Plowshare	12 kt	390
21:15:00.10	37.114376	-116.054313	4,195	-1,326	Weapons Related	20 to 200 kt	391
21:15:00.16 21:15:00.16	37.134236 37.134236	-116.070624 -116.070624	4,286 4,286	-725 -624	Weapons Related Weapons Related	Less than 20 kt 3.4 kt	392
20:00:00.04	37.034775	-116.013150	4,001	-592	Weapons Related	1.3 kt	393
20:00:00.07 20:00:00.07	37.039511 37.048378	-116.024762 -116.034098	4,005 4,026	-493 -231	Weapons Related Safety Experiment	Less than 20 kt Less than 20 kt	394
20:10:00.10	37.177757	-116.067879	4,386	-498	Weapons Effects	2.7 kt	395
19:35:00.09	37.082661	-116.343440	5,329	-89	Plowshare	92 tons	396

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Whetstone – Continued

397	Wool ☹ Drillback release of radioactivity detected onsite only	01/14/1965	LLNL	NNSS	U9bh	Shaft
398	Tern ☹ Accidental release of radioactivity detected onsite only	01/29/1965	LANL	NNSS	U3dw	Shaft
399	Cashmere ☹ Drillback release of radioactivity detected onsite only	02/04/1965	LLNL	NNSS	U2ad	Shaft
400	Alpaca Accidental release of radioactivity detected offsite	02/12/1965	LLNL	NNSS	U2a	Shaft
401	Merlin ☹ Accidental release of radioactivity detected onsite only	02/16/1965	LANL	NNSS	U3ct	Shaft
402	Wishbone ☹ Accidental and drillback release of radioactivity detected onsite only	02/18/1965	LLNL/DoD	NNSS	U5a	Shaft
403	Seersucker Accidental and drillback release of radioactivity detected onsite only	02/19/1965	LLNL	NNSS	U9bm	Shaft
404	Wagtail Drillback release of radioactivity detected onsite only	03/03/1965	LANL	NNSS	U3an	Shaft
405	Suede Drillback release of radioactivity detected onsite only	03/20/1965	LLNL	NNSS	U9bk	Shaft
406	Cup ☹ Drillback release of radioactivity detected onsite only	03/26/1965	LLNL	NNSS	U9cb	Shaft
407	Kestrel ☹ Drillback release of radioactivity detected onsite only	04/05/1965	LANL	NNSS	U3dd	Shaft
408	Palanquin Radioactivity detected offsite	04/14/1965	LLNL	NNSS	U20k	Crater
409	Gum Drop Controlled and drillback release of radioactivity detected onsite only	04/21/1965	LLNL/DoD	NNSS	U16a.02	Tunnel
410	Chenille ☹ Accidental and drillback release of radioactivity detected onsite only	04/22/1965	LLNL	NNSS	U9bg	Shaft
411	Muscovy ☹	04/23/1965	LANL	NNSS	U3dx	Shaft
412	Tee ☹ Accidental and drillback release of radioactivity detected offsite	05/07/1965	LLNL	NNSS	U2ab	Shaft

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Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Whetstone – Continued

16:00:00.14	37.118976	-116.025639	4,310	-709	Weapons Related	Less than 20 kt	397
18:22:00.03	37.044943	-116.014094	4,032	-691	Weapons Related	Less than 20 kt	398
15:30:00.11	37.130698	-116.062466	4,256	-762	Weapons Related	Less than 20 kt	399
15:10:29.49	37.164484	-116.077415	4,402	-738	Weapons Related	330 tons	400
17:30:00.04	37.051593	-116.024664	4,038	-972	Weapons Related	10.1 kt	401
16:18:47.15	36.817963	-115.950093	3,086	-574	Weapons Effects	Less than 20 kt	402
15:28:54.11	37.117230	-116.031855	4,269	-473	Weapons Related	Less than 20 kt	403
19:13:00.03	37.064465	-116.038050	4,060	-2,459	Weapons Related	20 to 200 kt	404
15:30:49.10	37.115376	-116.027364	4,307	-470	Weapons Related	Less than 20 kt	405
15:34:08.16	37.147554	-116.043762	4,245	-1,775	Weapons Related	20 to 200 kt	406
21:00:00.04	37.025767	-116.023511	3,985	-1,466	Weapons Related	Less than 20 kt	407
13:14:00.10	37.280320	-116.524449	6,194	-280	Plowshare	4.3 kt	408
22:00:00.03	37.007111	-116.202949	6,425	-1,000	Weapons Effects	Less than 20 kt	409
13:39:00.10	37.111374	-116.031359	4,276	-462	Weapons Related	Less than 20 kt	410
21:44:00.04	37.017373	-115.996175	3,991	-592	Weapons Related	Less than 20 kt	411
15:47:11.15	37.140318	-116.067522	4,297	-624	Weapons Effects	7 kt	412

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Whetstone – Continued

413	Buteo	05/12/1965	LANL	NNSS	U20a	Shaft
414	Cambric	05/14/1965	LLNL	NNSS	U5e	Shaft
415	Scaup ☹	05/14/1965	LANL	NNSS	U3daS	Shaft
416	Tweed ☹ Drillback release of radioactivity detected onsite only	05/21/1965	LLNL	NNSS	U9bn	Shaft
417	Petrel ☹	06/11/1965	LANL	NNSS	U3dy	Shaft
418	Organdy ☹ Drillback release of radioactivity detected onsite only	06/11/1965	LLNL	NNSS	U9bo	Shaft
419	Diluted Waters ☹ Accidental release of radioactivity detected offsite	06/16/1965	LLNL/DoD	NNSS	U5b	Shaft
420	Tiny Tot Accidental release of radioactivity detected onsite only	06/17/1965	LLNL/DoD	NNSS	U15e	Tunnel

Operation Flintlock

421	Izzer ☹ Drillback release of radioactivity detected onsite only	07/16/1965	LLNL	NNSS	U9bp	Shaft
422	Pongee Accidental and drillback release of radioactivity detected onsite only	07/22/1965	LLNL	NNSS	U2ah	Shaft
423	Bronze ☹ Drillback release of radioactivity detected onsite only	07/23/1965	LANL	NNSS	U7f	Shaft
424	Mauve ☹	08/06/1965	LANL	NNSS	U3dp	Shaft
425	Ticking Drillback release of radioactivity detected onsite only	08/21/1965	LLNL	NNSS	U9bj	Shaft
426	Centaur ☹ Accidental and drillback release of radioactivity detected onsite only	08/27/1965	LLNL	NNSS	U2ak	Shaft
427	Moa ☹ Screamer ☹ Simultaneous, separate holes Screamer: Accidental release of radioactivity detected onsite only	09/01/1965 09/01/1965	LANL LANL	NNSS NNSS	U3ed U3dg	Shaft Shaft
428	Charcoal ☹	09/10/1965	LANL/UK	NNSS	U7g	Shaft
429	Elkhart ☹ Drillback release of radioactivity detected onsite only	09/17/1965	LLNL	NNSS	U9bs	Shaft
430	Long Shot Nuclear test detection experiment	10/29/1965	LANL/DoD		Amchitka, Alaska ----	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Whetstone – Continued

18:15:00.10	37.242607	-116.431741	6,520	-2,282	Weapons Related	Less than 20 kt	413
14:57:52.15	36.823339	-115.967700	3,137	-967	Weapons Related	750 tons	414
17:32:36.23	37.058797	-116.011408	4,098	-1,401	Weapons Related	Less than 20 kt	415
13:08:52.11	37.118498	-116.028555	4,292	-933	Weapons Related	Less than 20 kt	416
19:45:00.04	37.042764	-116.017885	4,016	-593	Weapons Related	1.3 kt	417
20:28:37.11	37.115727	-116.024123	4,332	-568	Weapons Related	Less than 20 kt	418
16:30:00.15	36.818004	-115.956925	3,095	-632	Weapons Effects	Less than 20 kt	419
17:00:00.09	37.223368	-116.057840	5,022	-364	Weapons Effects	Less than 20 kt	420

Operation Flintlock

13:04:24.10	37.114951	-116.033044	4,264	-537	Weapons Related	Less than 20 kt	421
13:21:08.11	37.131746	-116.067724	4,270	-440	Weapons Related	Less than 20 kt	422
17:00:00.04	37.097785	-116.033872	4,213	-1,742	Weapons Related	20 to 200 kt	423
17:23:30.04	37.017616	-116.040704	3,978	-1,053	Weapons Related	Less than 20 kt	424
13:43:08.15	37.112583	-116.026890	4,314	-690	Weapons Related	Less than 20 kt	425
13:51:13.11	37.137259	-116.070943	4,299	-564	Weapons Related	Less than 20 kt	426
20:08:00.04 20:08:00.04	37.037256 37.022945	-116.014845 -116.009829	4,005 3,975	-635 -991	Weapons Related Weapons Effects	Less than 20 kt Less than 20 kt	427
17:12:00.03	37.077921	-116.017582	4,172	-1,494	Joint US-UK	20 to 200 kt	428
15:08:23.10	37.110981	-116.035477	4,245	-723	Weapons Related	Less than 20 kt	429
21:00:00.08	51.436120	179.179220	125	-2,297	Vela Uniform	80 kt	430

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Flintlock – Continued

431	Sepia ☹ Drillback release of radioactivity detected onsite only	11/12/1965	LANL	NNSS	U3en	Shaft
432	Kermet ☹ Accidental and drillback release of radioactivity detected onsite only	11/23/1965	LLNL	NNSS	U2c	Shaft
433	Corduoy ☹ Drillback release of radioactivity detected onsite only	12/03/1965	LLNL	NNSS	U10k	Shaft
434	Emerson ☹ Accidental and drillback release of radioactivity detected onsite only	12/16/1965	LLNL	NNSS	U2al	Shaft
435	Buff ☹	12/16/1965	LANL	NNSS	U3dh	Shaft
436	Maxwell Drillback release of radioactivity detected onsite only	01/13/1966	LLNL	NNSS	U9br	Shaft
437	Lampblack	01/18/1966	LANL	NNSS	U7i	Shaft
438	Sienna ☹ Drillback release of radioactivity detected onsite only	01/18/1966	LANL	NNSS	U3cj	Shaft
439	Dovekie ☹	01/21/1966	LANL	NNSS	U3cd	Shaft
440	Reo ☹ Accidental and drillback release of radioactivity detected onsite only	01/22/1966	LLNL	NNSS	U10m	Shaft
441	Plaid II ☹ Accidental and drillback release of radioactivity detected onsite only	02/03/1966	LLNL	NNSS	U2r	Shaft
442	Rex Drillback release of radioactivity detected onsite only	02/24/1966	LLNL	NNSS	U20h	Shaft
443	Red Hot Accidental release of radioactivity detected offsite	03/05/1966	LANL/DoD	NNSS	U12g.06	Tunnel
444	Cinnamon Finfoot ☹ Simultaneous, separate holes Finfoot: Accidental release of radioactivity detected onsite only	03/07/1966 03/07/1966	LANL LANL	NNSS NNSS	U3dm U3du	Shaft Shaft
445	Clymer ☹ Drillback release of radioactivity detected onsite only	03/12/1966	LLNL	NNSS	U9ce	Shaft
446	Purple ☹	03/18/1966	LANL	NNSS	U3ds	Shaft

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Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Flintlock – Continued

18:00:00.05	37.049936	-116.022961	4,033	-791	Weapons Related	Less than 20 kt	431
18:17:32.10	37.161846	-116.071790	4,368	-644	Weapons Related	Less than 20 kt	432
15:13:02.10	37.164690	-116.053221	4,273	-2,227	Weapons Related	20 to 200 kt	433
15:39:18.15	37.140792	-116.064050	4,289	-853	Weapons Related	Less than 20 kt	434
19:15:00.04	37.072497	-116.029969	4,102	-1,642	Weapons Related	20 to 200 kt	435
15:37:43.10	37.116165	-116.028403	4,298	-600	Weapons Related	Less than 20 kt	436
18:35:00.04	37.091654	-116.019550	4,246	-1,842	Weapons Related	20 to 200 kt	437
18:35:00.04	37.037278	-116.019303	4,003	-902	Weapons Related	Less than 20 kt	438
18:28:00.04	37.031770	-116.016605	3,991	-1,093	Weapons Related	Less than 20 kt	439
15:17:19.10	37.157159	-116.039558	4,296	-683	Weapons Related	Less than 20 kt	440
18:17:37.10	37.126269	-116.070340	4,260	-881	Weapons Related	Less than 20 kt	441
15:55:07.04	37.271783	-116.434726	6,557	-2,202	Weapons Related	19 kt	442
18:15:00.10	37.174446	-116.209226	7,632	-1,330	Weapons Effects	Less than 20 kt	443
18:41:00.04 18:41:00.07	37.034601 37.037340	-116.031660 -116.030263	4,000 4,004	-393 -642	Safety Experiment Weapons Related	Less than 20 kt Less than 20 kt	444
18:04:13.11	37.143627	-116.053391	4,242	-1,303	Weapons Related	Less than 20 kt	445
19:00:00.04	37.009209	-116.009951	3,959	-1,092	Weapons Related	Less than 20 kt	446

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type	
Operation Flintlock – Continued						
447	Templar Excavation device development Drillback release of radioactivity detected onsite only	03/24/1966	LLNL	NNSS	U9bt	Shaft
448	Lime	04/01/1966	LANL	NNSS	U7j	Shaft
449	Stutz ◡ Drillback release of radioactivity detected onsite only	04/06/1966	LLNL	NNSS	U2ca	Shaft
450	Tomato ◡	04/07/1966	LANL	NNSS	U3ek	Shaft
451	Duryea Drillback release of radioactivity detected onsite only	04/14/1966	LLNL	NNSS	U20a-1	Shaft
452	Fenton ◡ Accidental and drillback release of radioactivity detected offsite by aircraft only	04/23/1966	LLNL	NNSS	U2m1	Shaft
453	Pin Stripe Accidental release of radioactivity detected offsite	04/25/1966	LANL/DoD	NNSS	U11b	Shaft
454	Ochre	04/29/1966	LANL	NNSS	U3ec	Shaft
455	Traveler ◡ Drillback release of radioactivity detected onsite only	05/04/1966	LLNL	NNSS	U2cd	Shaft
456	Cyclamen ◡ Included heavy element experiment	05/05/1966	LANL	NNSS	U3cx	Shaft
457	Chartreuse	05/06/1966	LANL	NNSS	U19d	Shaft
458	Tapestry ◡ Accidental and drillback release of radioactivity detected onsite only	05/12/1966	LLNL	NNSS	U2an	Shaft
459	Piranha ◡	05/13/1966	LANL	NNSS	U7e	Shaft
460	Dumont ◡ Drillback release of radioactivity detected onsite only	05/19/1966	LLNL	NNSS	U2t	Shaft
461	Discus Thrower ◡	05/27/1966	LANL/DoD	NNSS	U8a	Shaft
462	Pile Driver Accidental release of radioactivity detected onsite only	06/02/1966	LANL/DoD	NNSS	U15a.01	Tunnel
463	Tan ◡	06/03/1966	LANL	NNSS	U7k	Shaft
464	Puce	06/10/1966	LANL	NNSS	U3bs	Shaft
465	Double Play Accidental release of radioactivity detected offsite Controlled and drillback release of radioactivity detected onsite only	06/15/1966	LLNL/DoD	NNSS	U16a.03	Tunnel

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Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Flintlock – Continued

14:55:28.14	37.113290	-116.032221	4,271	-492	Plowshare	370 tons	447
18:40:00.04	37.102659	-116.020804	4,326	-1,842	Weapons Related	Less than 20 kt	448
13:57:17.10	37.139472	-116.141747	4,872	-742	Weapons Related	Less than 20 kt	449
22:27:30.04	37.017361	-115.993093	4,010	-742	Weapons Related	Less than 20 kt	450
14:13:43.10	37.242607	-116.431741	6,520	-1,784	Weapons Related	70 kt	451
14:55:26.14	37.160491	-116.083743	4,423	-549	Weapons Related	1.4 kt	452
18:38:00.14	36.887407	-115.941661	3,586	-970	Weapons Effects	Less than 20 kt	453
13:33:00.04	37.043620	-116.023357	4,013	-414	Safety Experiment	Less than 20 kt	454
13:32:17.09	37.137027	-116.138007	4,781	-648	Weapons Related	Less than 20 kt	455
14:00:00.04	37.050572	-116.038720	4,036	-1,001	Weapons Related	12 kt	456
15:00:00.08	37.347938	-116.322827	6,861	-2,188	Weapons Related	73 kt	457
19:37:26.20	37.134240	-116.071989	4,291	-816	Weapons Related	Less than 20 kt	458
13:30:00.04	37.086803	-116.034310	4,146	-1,800	Weapons Related	20 to 200 kt	459
13:56:28.14	37.111103	-116.058798	4,195	-2,201	Weapons Related	20 to 200 kt	460
20:00:00.04	37.178340	-116.098631	4,615	-1,106	Weapons Effects	22 kt	461
15:30:00.09	37.227022	-116.056412	5,090	-1,518	Weapons Effects	62 kt	462
14:00:00.04	37.068410	-116.036173	4,070	-1,840	Weapons Related	20 to 200 kt	463
14:30:00.04	37.059367	-116.039682	4,053	-1,593	Weapons Related	Less than 20 kt	464
17:00:00.04	37.009611	-116.203797	6,499	-1,075	Weapons Effects	Less than 20 kt	465

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type	
Operation Flintlock – Continued						
466	Kankakee ☹ Drillback release of radioactivity detected onsite only	06/15/1966	LLNL	NNSS	U10p	Shaft
467	Vulcan ☹ Device development Heavy element production Drillback release of radioactivity detected onsite only	06/25/1966	LLNL	NNSS	U2bd	Shaft
468	Halfbeak	06/30/1966	LANL	NNSS	U19b	Shaft
Operation Latchkey						
469	Saxon ☹ Excavation device development Drillback release of radioactivity detected onsite only	07/28/1966	LLNL	NNSS	U2cc	Shaft
470	Rovena ☹ Drillback release of radioactivity detected onsite only	08/10/1966	LLNL	NNSS	U10s	Shaft
471	Tangerine	08/12/1966	LANL	NNSS	U3eb	Shaft
472	Derringer Accidental release of radioactivity detected offsite	09/12/1966	LANL/SNL/DoD	NNSS	U5i	Shaft
473	Daiquiri	09/23/1966	LANL	NNSS	U7o	Shaft
474	Newark ☹ Drillback release of radioactivity detected onsite only	09/29/1966	LLNL	NNSS	U10u	Shaft
475	Khaki	10/15/1966	LANL	NNSS	U3et	Shaft
476	Simms ☹ Excavation device development Drillback release of radioactivity detected onsite only	11/05/1966	LLNL	NNSS	U10w	Shaft
477	Ajax ☹ Accidental and drillback release of radioactivity detected onsite only	11/11/1966	LLNL	NNSS	U9al	Shaft
478	Cerise ☹ Accidental release of radioactivity detected onsite only	11/18/1966	LANL	NNSS	U3eu	Shaft
479	Vigil Accidental release of radioactivity detected onsite only	11/22/1966	LLNL	NNSS	U10ad	Shaft
480	Sterling Nuclear test detection experiment Detonation in the same cavity created by the Salmon test	12/03/1966	LLNL/DoD	near Hattiesburg, Mississippi	----	Shaft

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Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Flintlock – Continued

18:02:47.13	37.171487	-116.049744	4,292	-1,492	Weapons Related	20 to 200 kt	466
17:13:00.07	37.155257	-116.073029	4,354	-1,057	Plowshare	25 kt	467
22:15:00.07	37.315753	-116.299858	6,792	-2,688	Weapons Related	365 kt	468

Operation Latchkey

15:33:30.13	37.140440	-116.134038	4,719	-504	Plowshare	1.2 kt	469
13:16:00.07	37.168619	-116.048635	4,281	-635	Weapons Related	Less than 20 kt	470
15:36:00.05	37.046264	-116.030188	4,021	-288	Safety Experiment	Less than 20 kt	471
15:30:00.05	36.875842	-115.951559	3,395	-837	Weapons Effects	7.8 kt	472
18:00:00.04	37.103299	-116.036570	4,223	-1,841	Weapons Related	Less than 20 kt	473
14:45:30.09	37.168610	-116.046919	4,285	-750	Weapons Related	Less than 20 kt	474
19:00:00.05	37.047027	-116.017846	4,031	-763	Weapons Related	Less than 20 kt	475
14:45:00.00	37.169907	-116.048082	4,286	-652	Plowshare	2.3 kt	476
12:00:00.14	37.134409	-116.050724	4,202	-782	Weapons Related	Less than 20 kt	477
15:02:00.04	37.042727	-116.011200	4,031	-693	Weapons Related	Less than 20 kt	478
15:00:00.13	37.169336	-116.049185	4,281	-307	Safety Experiment	Less than 20 kt	479
12:15:00.05	31.142300	-89.570000	265	-2,710	Vela Uniform	380 tons	480

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Latchkey – Continued

481	Sidecar ☹ Accidental release of radioactivity detected onsite only	12/13/1966	LANL	NNSS	U3ez	Shaft
482	New Point ☹ Accidental release of radioactivity detected onsite only	12/13/1966	LLNL/DoD	NNSS	U11c	Shaft
483	Greeley ☹	12/20/1966	LLNL	NNSS	U20g	Shaft
484	Rivet I	01/18/1967	LLNL	NNSS	U10aa	Shaft
485	Nash ☹ Accidental release of radioactivity detected offsite	01/19/1967	LLNL	NNSS	U2ce	Shaft
486	Bourbon ☹	01/20/1967	LANL	NNSS	U7nS	Shaft
487	Rivet II ☹ Accidental release of radioactivity detected onsite only	01/26/1967	LLNL	NNSS	U10z	Shaft
488	Ward ☹	02/08/1967	LLNL	NNSS	U10x	Shaft
489	Persimmon ☹	02/23/1967	LANL	NNSS	U3dn	Shaft
490	Agile ☹	02/23/1967	LLNL	NNSS	U2v	Shaft
491	Rivet III ☹ Drillback release of radioactivity detected onsite only	03/02/1967	LLNL	NNSS	U10y	Shaft
492	Mushroom ☹ Accidental release of radioactivity detected onsite only	03/03/1967	LANL	NNSS	U3ef	Shaft
493	Fizz	03/10/1967	LANL	NNSS	U3fr	Shaft
494	Oakland Drillback release of radioactivity detected onsite only	04/04/1967	LLNL	NNSS	U2bi	Shaft
495	Heilman Accidental and drillback release of radioactivity detected onsite only	04/06/1967	LLNL	NNSS	U2cg	Shaft
496	Fawn ☹	04/07/1967	LANL	NNSS	U3eo	Shaft
497	Chocolate ☹	04/21/1967	LANL	NNSS	U3es	Shaft
498	Effendi ☹	04/27/1967	LLNL	NNSS	U2ap	Shaft
499	Mickey ☹	05/10/1967	LANL	NNSS	U7m	Shaft
500	Commodore ☹ Drillback release of radioactivity detected onsite only	05/20/1967	LLNL	NNSS	U2am	Shaft
501	Scotch	05/23/1967	LANL	NNSS	U19aS	Shaft
502	Absinthe	05/26/1967	LANL	NNSS	U3ep	Shaft
503	Knickerbocker Drillback release of radioactivity detected onsite only	05/26/1967	LLNL	NNSS	U20d	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Latchkey – Continued

17:50:00.04	37.034742	-116.007668	4,010	-788	Weapons Related	Less than 20 kt	481
21:00:00.08	36.877209	-115.938776	3,381	-785	Weapons Effects	Less than 20 kt	482
15:30:00.08	37.302021	-116.409182	6,470	-3,991	Weapons Related	870 kt	483
14:55:00.00	37.165072	-116.047418	4,273	-498	Weapons Related	Less than 20 kt	484
16:45:00.14	37.143608	-116.136077	4,764	-1,194	Weapons Related	39 kt	485
17:40:04.41	37.099826	-116.004708	4,374	-1,836	Weapons Related	20 to 200 kt	486
16:30:00.00	37.164751	-116.048930	4,267	-648	Weapons Related	Less than 20 kt	487
15:15:00.13	37.167476	-116.048002	4,278	-853	Weapons Related	Less than 20 kt	488
18:34:00.04	37.017493	-116.016727	3,972	-981	Weapons Related	Less than 20 kt	489
18:50:00.13	37.126802	-116.067248	4,256	-2,406	Weapons Related	20 to 200 kt	490
15:00:00.00	37.165822	-116.049570	4,270	-898	Weapons Related	Less than 20 kt	491
15:19:00.04	37.039433	-116.011061	4,019	-589	Weapons Related	Less than 20 kt	492
15:00:00.04	37.047313	-116.030635	4,022	-386	Safety Experiment	Less than 20 kt	493
14:20:00.15	37.161930	-116.083098	4,423	-543	Weapons Related	Less than 20 kt	494
15:00:00.12	37.137276	-116.133552	4,699	-501	Weapons Related	Less than 20 kt	495
15:00:00.04	37.054329	-116.023095	4,047	-889	Weapons Related	Less than 20 kt	496
15:09:00.04	37.019257	-116.038296	3,979	-789	Weapons Related	Less than 20 kt	497
14:45:00.00	37.138735	-116.064073	4,284	-725	Weapons Related	Less than 20 kt	498
13:40:00.04	37.077804	-115.996158	4,280	-1,639	Weapons Related	20 to 200 kt	499
15:00:00.20	37.130361	-116.064819	4,258	-2,445	Weapons Related	250 kt	500
14:00:00.04	37.275028	-116.370854	6,761	-3,207	Weapons Related	155 kt	501
12:30:00.03	37.044975	-116.019919	4,022	-389	Safety Experiment	Less than 20 kt	502
15:00:01.50	37.247887	-116.481068	6,252	-2,075	Weapons Related	76 kt	503

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Latchkey – Continued

504	Switch Excavation device development Drillback release of radioactivity detected onsite only	06/22/1967	LLNL	NNSS	U9bv	Shaft
505	Midi Mist Controlled release of radioactivity detected offsite by aircraft only Drillback release of radioactivity detected onsite only	06/26/1967	LLNL/DoD	NNSS	U12n.02	Tunnel
506	Umber ☹ Accidental release of radioactivity detected offsite	06/29/1967	LANL	NNSS	U3em	Shaft

Operation Crosstie

507	Vito	07/14/1967	LLNL	NNSS	U10ab	Shaft
508	Stanley ☹ Drillback release of radioactivity detected onsite only	07/27/1967	LLNL	NNSS	U10q	Shaft
509	Gibson ☹	08/04/1967	LANL	NNSS	U3ew	Shaft
510	Washer Drillback release of radioactivity detected onsite only	08/10/1967	LLNL	NNSS	U10r	Shaft
511	Bordeaux ☹	08/18/1967	LANL	NNSS	U3dr	Shaft
512	Lexington ☹ Gas sampling and drillback release of radioactivity detected onsite only	08/24/1967	LLNL	NNSS	U2bm	Shaft
513	Door Mist Controlled and accidental release of radioactivity detected offsite	08/31/1967	LANL/DoD	NNSS	U12g.07	Tunnel
514	Yard ☹ Drillback release of radioactivity detected onsite only	09/07/1967	LLNL	NNSS	U10af	Shaft
515	Gilroy Drillback release of radioactivity detected onsite only	09/15/1967	LANL	NNSS	U3ex	Shaft
516	Marvel ☹ Emplacement technique experiment Accidental and drillback release of radioactivity detected onsite only	09/21/1967	LLNL	NNSS	U10dS1	Shaft
517	Zaza ☹	09/27/1967	LANL	NNSS	U4c	Shaft
518	Lanpher ☹ Drillback release of radioactivity detected onsite only	10/18/1967	LLNL	NNSS	U2x	Shaft
519	Sazerac ☹ Drillback release of radioactivity detected onsite only	10/25/1967	LANL	NNSS	U3fa	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Latchkey – Continued

13:10:00.00	37.125507	-116.029525	4,277	-991	Plowshare	3.1 kt	504
16:00:00.08	37.202059	-116.208708	7,306	-1,237	Weapons Effects	Less than 20 kt	505
11:25:00.04	37.028519	-116.023488	3,988	-1,018	Weapons Effects	10 kt	506

Operation Crosstie

13:30:00.08	37.165201	-116.045800	4,280	-317	Safety Experiment	Less than 20 kt	507
13:00:00.12	37.148685	-116.049404	4,237	-1,587	Weapons Related	20 to 200 kt	508
14:00:00.04	37.024338	-116.013239	3,980	-790	Weapons Related	Less than 20 kt	509
14:10:00.00	37.156644	-116.048142	4,257	-1,534	Weapons Related	Less than 20 kt	510
20:12:30.04	37.012107	-116.037327	3,970	-1,089	Weapons Related	Less than 20 kt	511
13:30:00.00	37.162684	-116.075033	4,386	-743	Weapons Related	Less than 20 kt	512
16:30:00.04	37.177511	-116.209811	7,619	-1,463	Weapons Effects	Less than 20 kt	513
13:45:00.00	37.153110	-116.053654	4,257	-1,708	Weapons Related	20 to 200 kt	514
17:30:00.04	37.034822	-116.021715	3,998	-789	Weapons Related	Less than 20 kt	515
20:45:00.00	37.165768	-116.039213	4,312	-577	Plowshare	2.2 kt	516
17:00:00.04	37.098718	-116.054096	4,158	-2,188	Weapons Related	20 to 200 kt	517
14:30:00.08	37.115537	-116.058505	4,206	-2,346	Weapons Related	20 to 200 kt	518
14:30:00.06	37.031558	-116.027224	3,995	-989	Weapons Related	Less than 20 kt	519

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type	
Operation Crossie – Continued						
520	Cognac Accidental release of radioactivity detected onsite only	10/25/1967	LANL	NNSS	U3fm	Shaft
521	Worth Drillback release of radioactivity detected onsite only	10/25/1967	LLNL	NNSS	U10ag	Shaft
522	Cobbler	11/08/1967	LANL	NNSS	U7u	Shaft
523	Polka Gas sampling and drillback release of radioactivity detected onsite only	12/06/1967	LLNL	NNSS	U10ai	Shaft
524	Gasbuggy Joint Government/industry gas stimulation experiment	12/10/1967	LLNL	near Farmington, New Mexico	----	Shaft
525	Stilt	12/15/1967	LANL	NNSS	U3fh	Shaft
526	Hupmobile ☹ Accidental release of radioactivity detected offsite	01/18/1968	LLNL	NNSS	U2y	Shaft
527	Staccato ☹ Drillback release of radioactivity detected onsite only	01/19/1968	LLNL	NNSS	U10ah	Shaft
528	Faultless Seismic calibration	01/19/1968	LLNL	Central Nevada	----	Shaft
529	Brush Accidental release of radioactivity detected onsite only	01/24/1968	LANL	NNSS	U3eq	Shaft
530	Cabriolet Radioactivity detected offsite	01/26/1968	LLNL	NNSS	U20l	Crater
531	Mallet ☹	01/31/1968	LANL	NNSS	U3fv	Shaft
532	Torch	02/21/1968	LANL	NNSS	U3fj	Shaft
533	Knox ☹ Drillback release of radioactivity detected onsite only	02/21/1968	LLNL	NNSS	U2at	Shaft
534	Dorsal Fin	02/29/1968	LANL/DoD	NNSS	U12e.10	Tunnel
535	Russet Accidental and Special Packaging Operation release of radioactivity detected onsite only	03/05/1968	LANL/DoD	NNSS	U6a	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Crossie – Continued

14:30:00.14	37.049749	-116.040443	4,034	-789	Weapons Related	Less than 20 kt	520
14:45:00.08	37.156291	-116.049466	4,251	-646	Weapons Related	Less than 20 kt	521
15:00:00.04	37.091760	-116.036669	4,164	-2,189	Weapons Related	Less than 20 kt	522
13:00:00.00	37.159219	-116.053821	4,263	-640	Weapons Related	Less than 20 kt	523
19:30:00.14	36.677905	-107.209025	7,204	-4,227	Plowshare	29 kt	524
15:00:00.04	37.036640	-116.002858	4,038	-1,091	Weapons Related	Less than 20 kt	525
16:30:00.13	37.145534	-116.066548	4,310	-810	Weapons Effects	7.4 kt	526
15:00:00.00	37.156337	-116.054750	4,261	-1,455	Weapons Related	20 to 200 kt	527
18:15:00.08	38.634221	-116.216221	6,030	-3,200	Weapons Related	200 to 1,000 kt	528
15:00:00.04	37.042747	-116.014798	4,021	-388	Weapons Related	Less than 20 kt	529
16:00:00.11	37.280797	-116.515339	6,197	-170	Plowshare	2.3 kt	530
15:30:00.04	37.000975	-116.010018	3,951	-788	Weapons Related	Less than 20 kt	531
15:00:00.04	37.041584	-116.002819	4,059	-789	Weapons Related	Less than 20 kt	532
15:30:00.00	37.116509	-116.054567	4,199	-2,116	Weapons Related	20 to 200 kt	533
17:08:30.04	37.184571	-116.212312	7,505	-1,345	Weapons Effects	Less than 20 kt	534
15:30:00.04	36.969998	-116.056680	3,930	-393	Weapons Related	Less than 20 kt	535

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type	
Operation Crossie – Continued						
536	Buggy-A	03/12/1968	LLNL	NNSS	U30a	Crater
	Buggy-B	03/12/1968	LLNL	NNSS	U30b	Crater
	Buggy-C	03/12/1968	LLNL	NNSS	U30c	Crater
	Buggy-D	03/12/1968	LLNL	NNSS	U30d	Crater
	Buggy-E	03/12/1968	LLNL	NNSS	U30e	Crater
	Simultaneous, separate holes Row charge experiment – five simultaneous detonations Buggy-A, -B, -C, -D, -E: Radioactivity detected offsite					
537	Pommard	03/14/1968	LANL	NNSS	U3ee	Shaft
538	Stinger	03/22/1968	LANL	NNSS	U19l	Shaft
539	Milk Shake Accidental release of radioactivity detected onsite only	03/25/1968	LLNL/DoD	NNSS	U5k	Shaft
540	Bevel	04/04/1968	LANL	NNSS	U3fu	Shaft
541	Noor ☐	04/10/1968	LLNL	NNSS	U2be	Shaft
	Throw ☐ Simultaneous, separate holes Noor: Drillback release of radioactivity detected onsite only	04/10/1968	LLNL	NNSS	U2bg	Shaft
542	Shuffle ☐ Drillback release of radioactivity detected onsite only	04/18/1968	LLNL	NNSS	U10t	Shaft
543	Scroll Nuclear test detection experiment Accidental release of radioactivity detected onsite only	04/23/1968	LLNL/DoD	NNSS	U19n	Shaft
544	Boxcar	04/26/1968	LLNL	NNSS	U20i	Shaft
545	Hatchet ☐	05/03/1968	LANL	NNSS	U3fz	Shaft
546	Crock ☐ Drillback release of radioactivity detected onsite only	05/08/1968	LLNL	NNSS	U10ak	Shaft
547	Clarksmobile ☐	05/17/1968	LLNL	NNSS	U2as	Shaft
548	Adze Accidental release of radioactivity detected onsite only	05/28/1968	LANL	NNSS	U3fw	Shaft
549	Wembley ☐	06/05/1968	LANL	NNSS	U3ey	Shaft
550	Tub-A ☐	06/06/1968	LLNL	NNSS	U10aj C	Shaft
	Tub-B ☐	06/06/1968	LLNL	NNSS	U10aj B	Shaft
	Tub-C	06/06/1968	LLNL	NNSS	U10aj F	Shaft
	Tub-D	06/06/1968	LLNL	NNSS	U10aj D	Shaft
	Tub-F	06/06/1968	LLNL	NNSS	U10aj A	Shaft
	Simultaneous, separate holes Tub-D: Gas sampling release of radioactivity detected onsite only					

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
Operation Crossie – Continued							
17:04:00.11	37.007336	-116.370794	5,210	-165	Plowshare	1.08 kt	536
17:04:00.11	37.007471	-116.371259	5,210	-165	Plowshare	1.08 kt	
17:04:00.11	37.007617	-116.371740	5,210	-165	Plowshare	1.08 kt	
17:04:00.11	37.007772	-116.372234	5,210	-165	Plowshare	1.08 kt	
17:04:00.11	37.007913	-116.372713	5,210	-165	Plowshare	1.08 kt	
15:19:00.06	37.047677	-116.011675	4,053	-686	Weapons Related	1.5 kt	537
15:00:00.04	37.332546	-116.311550	6,766	-2,191	Weapons Related	20 to 200 kt	538
18:44:27.04	36.871674	-115.931994	3,349	-868	Weapons Effects	Less than 20 kt	539
15:02:00.04	37.052264	-116.021742	4,043	-790	Weapons Related	Less than 20 kt	540
14:00:00.00	37.154329	-116.079724	4,385	-1,253	Weapons Related	20 to 200 kt	541
14:00:00.00	37.156631	-116.083142	4,408	-757	Weapons Related	Less than 20 kt	
14:05:00.00	37.152467	-116.037881	4,285	-1,619	Weapons Related	20 to 200 kt	542
17:01:30.08	37.337655	-116.376459	6,754	-740	Vela Uniform	Less than 20 kt	543
15:00:00.07	37.295373	-116.456591	6,370	-3,825	Weapons Related	1.3 Mt	544
16:00:00.04	37.028499	-116.020744	3,987	-789	Weapons Related	Less than 20 kt	545
14:10:00.00	37.157276	-116.035786	4,317	-596	Weapons Related	Less than 20 kt	546
13:00:00.00	37.120001	-116.059701	4,218	-1,551	Weapons Related	20 to 200 kt	547
14:45:00.04	37.008586	-115.996256	3,987	-788	Weapons Related	Less than 20 kt	548
14:21:30.34	37.034796	-116.016922	3,998	-781	Weapons Related	Less than 20 kt	549
21:30:00.00	37.167432	-116.043359	4,294	-620	Weapons Related	Less than 20 kt	550
21:30:00.00	37.165358	-116.044309	4,285	-620	Weapons Related	Less than 20 kt	
21:30:00.00	37.165346	-116.041550	4,298	-620	Weapons Related	Less than 20 kt	
21:30:00.00	37.166936	-116.045676	4,282	-896	Weapons Related	Less than 20 kt	
21:30:00.00	37.166925	-116.042920	4,294	-620	Weapons Related	Less than 20 kt	

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Crosstie – Continued

551	Rickey ☹	06/15/1968	LANL	NNSS	U19c	Shaft
552	Funnel Accidental release of radioactivity detected onsite only	06/25/1968	LANL	NNSS	U3ga	Shaft
553	Sevilla Accidental release of radioactivity detected onsite only	06/25/1968	LANL	NNSS	U3fk	Shaft
554	Chateaugay	06/28/1968	LLNL	NNSS	U20t	Shaft

Operation Bowline

555	Spud ☹	07/17/1968	LANL	NNSS	U3fy	Shaft
556	Tanya ☹ Drillback release of radioactivity detected onsite only	07/30/1968	LLNL	NNSS	U2dt	Shaft
557	Imp ☹ Accidental release of radioactivity detected onsite only	08/09/1968	LLNL	NNSS	U2bj	Shaft
558	Rack ☹ Gas sampling and drillback release of radioactivity detected onsite only	08/15/1968	LLNL	NNSS	U9ap	Shaft
559	Diana Moon Accidental release of radioactivity detected onsite only	08/27/1968	LLNL/DoD	NNSS	U11e	Shaft
560	Sled	08/29/1968	LANL	NNSS	U19i	Shaft
561	Noggin ☹ Drillback release of radioactivity detected onsite only	09/06/1968	LLNL	NNSS	U9bx	Shaft
562	Knife A	09/12/1968	LANL	NNSS	U3fb	Shaft
563	Stoddard ☹ Excavation device development Drillback release of radioactivity detected onsite only	09/17/1968	LLNL	NNSS	U2cmS	Shaft
564	Hudson Seal	09/24/1968	LLNL/DoD	NNSS	U12n.04	Tunnel
565	Welder ☹	10/03/1968	LANL	NNSS	U3fs	Shaft
566	Knife C ☹	10/03/1968	LANL	NNSS	U3er	Shaft
567	Vat ☹	10/10/1968	LLNL	NNSS	U9cf	Shaft
568	Hula ☹ Accidental, gas sampling, and drillback release of radioactivity detected onsite only	10/29/1968	LLNL	NNSS	U9bu	Shaft
569	Bit-A Bit-B Simultaneous, same hole	10/31/1968 10/31/1968	LANL LANL	NNSS NNSS	U3gt U3gt	Shaft Shaft
570	File ☹	10/31/1968	LANL	NNSS	U3gb	Shaft
571	Crew ☹	11/04/1968	LLNL	NNSS	U2db	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Crosstie – Continued

13:59:59.97	37.264858	-116.315533	7,032	-2,242	Weapons Related	20 to 200 kt	551
15:30:00.04	37.046302	-116.031075	4,023	-389	Weapons Related	Less than 20 kt	552
15:30:00.04	37.041530	-115.993218	4,111	-1,177	Weapons Related	Less than 20 kt	553
12:22:00.08	37.245458	-116.483751	6,245	-1,992	Weapons Related	20 to 200 kt	554

Operation Bowline

14:00:00.04	37.000912	-115.999744	3,956	-788	Weapons Related	Less than 20 kt	555
13:00:00.00	37.116718	-116.083109	4,257	-1,250	Weapons Related	20 to 200 kt	556
13:00:00.00	37.161740	-116.078057	4,399	-586	Weapons Related	Less than 20 kt	557
17:00:00.00	37.123685	-116.049093	4,201	-655	Weapons Related	Less than 20 kt	558
16:30:00.04	36.877167	-115.931938	3,385	-794	Weapons Effects	Less than 20 kt	559
22:45:00.04	37.250267	-116.347773	6,836	-2,391	Weapons Related	20 to 200 kt	560
14:00:00.13	37.136018	-116.048028	4,220	-1,909	Weapons Related	20 to 200 kt	561
14:00:00.04	37.031750	-116.012497	3,994	-1,089	Weapons Related	Less than 20 kt	562
14:00:00.04	37.119816	-116.128344	4,583	-1,535	Plowshare	31 kt	563
17:05:01.09	37.204715	-116.207275	7,200	-1,130	Weapons Effects	Less than 20 kt	564
14:00:00.04	37.046478	-116.030608	4,022	-386	Safety Experiment	Less than 20 kt	565
14:29:00.04	37.025877	-115.993703	4,030	-989	Weapons Related	Less than 20 kt	566
14:30:00.00	37.133265	-116.043183	4,208	-640	Weapons Related	Less than 20 kt	567
15:36:08.60	37.113212	-116.041804	4,202	-651	Weapons Related	Less than 20 kt	568
18:30:00.04 18:30:00.04	37.046984 37.046984	-116.030333 -116.030333	4,022 4,022	-487 -387	Safety Experiment Safety Experiment	Less than 20 kt Less than 20 kt	569
18:30:00.04	37.017048	-116.036598	3,977	-751	Weapons Related	Less than 20 kt	570
15:15:00.09	37.130426	-116.087381	4,312	-1,977	Weapons Related	20 to 200 kt	571

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type	
Operation Bowline – Continued						
572	Crew-2nd ▼ Crew-3rd ▼ Simultaneous, same hole	11/04/1968 11/04/1968	LLNL LLNL	NNSS NNSS	U2db U2db	Shaft Shaft
573	Auger	11/15/1968	LANL	NNSS	U3fx	Shaft
574	Knife B ▼	11/15/1968	LANL	NNSS	U3dz	Shaft
575	Ming Vase	11/20/1968	LANL/DoD	NNSS	U16a.04	Tunnel
576	Tinderbox Drillback release of radioactivity detected onsite only	11/22/1968	LLNL	NNSS	U9az	Shaft
577	Schooner Radioactivity detected offsite	12/08/1968	LLNL	NNSS	U20u	Crater
578	Bay Leaf	12/12/1968	LANL	NNSS	U3gq	Shaft
579	Tyg-A ▼ Tyg-B ▼ Tyg-C ▼ Tyg-D ▼ Tyg-E ▼ Tyg-F ▼ Simultaneous, separate holes Tyg-A and -B: Accidental release of radioactivity detected onsite only Tyg-C: Drillback release of radioactivity detected onsite only	12/12/1968 12/12/1968 12/12/1968 12/12/1968 12/12/1968 12/12/1968	LLNL LLNL LLNL LLNL LLNL LLNL	NNSS NNSS NNSS NNSS NNSS NNSS	U2dc #4 U2dc #5 U2dc #3 U2dc #2 U2dc #1 U2dc #6	Shaft Shaft Shaft Shaft Shaft Shaft
580	Scissors ▼ Accidental release of radioactivity detected onsite only	12/12/1968	LANL	NNSS	U3gh	Shaft
581	Benham	12/19/1968	LLNL	NNSS	U20c	Shaft
582	Packard ▼ Accidental release of radioactivity detected onsite only	01/15/1969	LLNL	NNSS	U2u	Shaft
583	Wineskin ▼	01/15/1969	LLNL	NNSS	U12r	Shaft
584	Shave ▼	01/22/1969	LANL	NNSS	U3gk	Shaft
585	Vise ▼	01/30/1969	LANL	NNSS	U3ej	Shaft
586	Biggin	01/30/1969	LLNL	NNSS	U9bz	Shaft
587	Nipper ▼	02/04/1969	LANL	NNSS	U3gl	Shaft
588	Winch	02/04/1969	LANL	NNSS	U3gf	Shaft
589	Cypress	02/12/1969	LLNL/SNL/DoD	NNSS	U12g.09	Tunnel
590	Valise Gas sampling release of radioactivity detected onsite only	03/18/1969	LLNL	NNSS	U9by	Shaft
591	Chatty ▼ Drillback release of radioactivity detected onsite only	03/18/1969	LLNL	NNSS	U2bn	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
Operation Bowline – Continued							
15:16:00.09	37.130426	-116.087381	4,312	-1,177	Weapons Related	Less than 20 kt	572
15:16:00.09	37.130426	-116.087381	4,312	-1,177	Weapons Related	Less than 20 kt	
15:30:00.04	37.047616	-116.000707	4,097	-789	Weapons Related	Less than 20 kt	573
15:45:00.04	37.026099	-116.034128	3,987	-1,191	Weapons Related	Less than 20 kt	574
18:00:00.03	37.009784	-116.207296	6,425	-1,010	Weapons Effects	Less than 20 kt	575
16:19:00.04	37.139862	-116.043129	4,225	-1,442	Weapons Related	Less than 20 kt	576
16:00:00.14	37.343363	-116.566766	5,563	-365	Plowshare	30 kt	577
15:00:00.04	37.046988	-116.031070	4,023	-427	Safety Experiment	Less than 20 kt	578
15:10:00.08	37.120775	-116.081431	4,265	-749	Weapons Related	Less than 20 kt	579
15:10:00.08	37.117543	-116.080434	4,254	-824	Weapons Related	Less than 20 kt	
15:10:00.08	37.118001	-116.078105	4,249	-749	Weapons Related	Less than 20 kt	
15:10:00.08	37.121234	-116.079102	4,261	-679	Weapons Related	Less than 20 kt	
15:10:00.08	37.119849	-116.077439	4,254	-649	Weapons Related	Less than 20 kt	
15:10:00.08	37.118828	-116.082599	4,264	-869	Weapons Related	Less than 20 kt	
15:20:00.04	37.003882	-116.040135	3,965	-789	Weapons Related	Less than 20 kt	580
16:30:00.04	37.231424	-116.474461	6,281	-4,600	Weapons Related	1.15 Mt	581
19:00:00.07	37.147869	-116.066530	4,315	-810	Weapons Effects	10 kt	582
19:30:00.04	37.209080	-116.226276	7,514	-1,700	Weapons Related	20 to 200 kt	583
15:00:00.04	37.015444	-115.995165	3,996	-790	Weapons Related	Less than 20 kt	584
15:00:00.04	37.053271	-116.030130	4,038	-1,490	Weapons Related	20 to 200 kt	585
15:17:00.12	37.133257	-116.041124	4,212	-795	Weapons Related	Less than 20 kt	586
15:00:00.04	37.002620	-116.010004	3,953	-790	Weapons Related	Less than 20 kt	587
15:00:00.04	37.009391	-116.043169	3,977	-789	Weapons Related	Less than 20 kt	588
16:18:20.88	37.169003	-116.211623	7,519	-1,350	Weapons Effects	Less than 20 kt	589
14:30:00.12	37.139091	-116.041715	4,225	-300	Safety Experiment	Less than 20 kt	590
14:40:00.43	37.162228	-116.076753	4,394	-639	Weapons Related	Less than 20 kt	591

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Bowline – Continued

592	Barsac ▼ Accidental release of radioactivity detected onsite only	03/20/1969	LANL	NNSS	U3gc	Shaft
593	Coffer ▼ Drillback release of radioactivity detected onsite only	03/21/1969	LLNL	NNSS	U2de	Shaft
594	Gourd-Amber ▼ Gourd-Brown ▼ Simultaneous, separate holes	04/24/1969 04/24/1969	LLNL LLNL	NNSS NNSS	U2bf U2bl	Shaft Shaft
595	Blenton ▼ Accidental release of radioactivity detected onsite only	04/30/1969	LANL	NNSS	U7p	Shaft
596	Thistle	04/30/1969	LANL	NNSS	U7t	Shaft
597	Purse ▼	05/07/1969	LLNL	NNSS	U20v	Shaft
598	Aliment	05/15/1969	LANL	NNSS	U3gj	Shaft
599	Ipecac-A Ipecac-B Simultaneous, separate holes Ipecac-A: Accidental release of radioactivity detected onsite only (trace)	05/27/1969 05/27/1969	LANL LANL	NNSS NNSS	U3hk-a U3hk-b	Shaft Shaft
600	Torrado ▼	05/27/1969	LANL	NNSS	U7w	Shaft
601	Tapper ▼ Accidental release of radioactivity detected onsite only	06/12/1969	LANL	NNSS	U3go	Shaft
602	Bowl-1 ▼ Bowl-2 ▼ Simultaneous, separate holes	06/26/1969 06/26/1969	LLNL LLNL	NNSS NNSS	U2bo #1 U2bo #2	Shaft Shaft

Operation Mandrel

603	Ildrim ▼	07/16/1969	LLNL	NNSS	U2au	Shaft
604	Hutch ▼ Drillback release of radioactivity detected onsite only	07/16/1969	LLNL	NNSS	U2df	Shaft
605	Spider-A ▼ Spider-B ▼ Simultaneous, separate holes Spider-A, -B: Drillback release of radioactivity detected onsite only	08/14/1969 08/14/1969	LLNL LLNL	NNSS NNSS	U2bp #1 U2bp #2	Shaft Shaft
606	Horehound	08/27/1969	LANL	NNSS	U3gm	Shaft
607	Pliers ▼ Accidental release of radioactivity detected onsite only	08/27/1969	LANL	NNSS	U3gn	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Bowline – Continued

18:12:00.04	37.021962	-116.031076	3,982	-998	Weapons Related	Less than 20 kt	592
14:30:00.41	37.133171	-116.087531	4,323	-1,525	Weapons Related	Less than 100 kt	593
13:04:00.14 13:04:00.14	37.163922 37.159915	-116.080512 -116.081744	4,418 4,409	-595 -744	Weapons Related Weapons Related	Less than 20 kt Less than 20 kt	594
17:00:00.04	37.081476	-116.014810	4,205	-1,830	Weapons Related	20 to 200 kt	595
17:00:00.04	37.090220	-116.006509	4,291	-1,839	Weapons Related	20 to 200 kt	596
13:45:00.04	37.282839	-116.501537	6,088	-1,964	Weapons Related	20 to 200 kt	597
18:00:00.04	37.011826	-115.985945	4,049	-789	Weapons Related	Less than 20 kt	598
14:00:00.04 14:00:00.04	37.014942 37.014793	-116.003044 -116.000993	3,965 3,968	-407 -408	Safety Experiment Safety Experiment	Less than 20 kt Less than 20 kt	599
14:15:00.04	37.075055	-115.996182	4,256	-1,689	Weapons Related	20 to 200 kt	600
14:00:00.04	37.008778	-116.031186	3,965	-994	Weapons Related	Less than 20 kt	601
16:00:00.13 16:00:00.13	37.162437 37.160733	-116.079494 -116.080021	4,407 4,402	-650 -750	Weapons Related Weapons Related	Less than 20 kt Less than 20 kt	602

Operation Mandrel

13:02:30.04	37.119384	-116.055988	4,209	-1,346	Weapons Related	20 to 200 kt	603
14:55:00.04	37.139465	-116.088314	4,354	-1,798	Weapons Related	20 to 200 kt	604
14:30:00.04 14:30:00.04	37.160197 37.158140	-116.064476 -116.064657	4,326 4,325	-700 -747	Weapons Related Weapons Related	Less than 20 kt Less than 20 kt	605
13:45:00.04	36.992656	-115.996396	3,942	-1,089	Weapons Related	Less than 20 kt	606
13:45:00.04	37.021455	-116.038959	3,984	-784	Weapons Related	Less than 20 kt	607

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type	
Operation Mandrel – Continued						
608	Rulison Joint Government/industry gas stimulation experiment Drillback release of radioactivity detected outside operational boundary (gas flaring)	09/10/1969	LLNL	near Parachute, Colorado	----	Shaft
609	Minute Steak ☹ Accidental release of radioactivity detected onsite only	09/12/1969	LLNL/DoD	NNSS	U11f	Shaft
610	Jorum	09/16/1969	LLNL	NNSS	U20e	Shaft
611	Kyack-A ☹ Kyack-B ☹ Simultaneous, separate holes Kyack-B: Accidental release of radioactivity detected onsite only	09/20/1969 09/20/1969	LLNL LLNL	NNSS NNSS	U2bq1 U2bq2	Shaft Shaft
612	Seaweed-C Seaweed-D Seaweed-E Simultaneous, separate holes Seaweed-D: Accidental release of radioactivity detected onsite only	10/01/1969 10/01/1969 10/01/1969	LANL LANL LANL	NNSS NNSS NNSS	U3hk-e U3hk-f U3hk-c	Shaft Shaft Shaft
613	Milrow Seismic calibration	10/02/1969	LANL	Amchitka, Alaska	----	Shaft
614	Pipkin Drillback release of radioactivity detected onsite only	10/08/1969	LLNL	NNSS	U20b	Shaft
615	Seaweed B Accidental release of radioactivity detected onsite only	10/16/1969	LANL	NNSS	U3hk-d	Shaft
616	Cruet ☹	10/29/1969	LLNL	NNSS	U2cn	Shaft
617	Pod-A Pod-B Pod-C Pod-D ☹ Simultaneous, separate holes Pod-D: Accidental release of radioactivity detected offsite Pod-A, -D: Drillback release of radioactivity detected onsite only	10/29/1969 10/29/1969 10/29/1969 10/29/1969	LLNL LLNL LLNL LLNL	NNSS NNSS NNSS NNSS	U2ch U2ci U2cj U2ck	Shaft Shaft Shaft Shaft
618	Calabash ☹	10/29/1969	LLNL	NNSS	U2av	Shaft
619	Scuttle Accidental release of radioactivity detected offsite by aircraft only	11/13/1969	LLNL	NNSS	U2bh	Shaft
620	Piccalilli ☹	11/21/1969	LANL	NNSS	U3fc	Shaft
621	Planer	11/21/1969	LANL	NNSS	U3el	Shaft
622	Diesel Train	12/05/1969	LANL/DoD	NNSS	U12e.11	Tunnel

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Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Mandrel – Continued

21:00:00.01	39.405350	-107.948470	8,200	-8,425	Plowshare	40 kt	608
18:02:20.42	36.877168	-115.929364	3,393	-868	Weapons Effects	Less than 20 kt	609
14:30:00.04	37.314092	-116.461577	6,316	-3,802	Weapons Related	Less than 1 Mt	610
14:30:00.04 14:30:00.04	37.158699 37.157372	-116.068599 -116.067041	4,342 4,331	-630 -610	Weapons Related Weapons Related	Less than 20 kt Less than 20 kt	611
14:30:00.04 14:30:00.04 14:30:00.04	37.011379 37.010461 37.013686	-115.999485 -116.000435 -115.999465	3,974 3,971 3,974	-389 -389 -408	Safety Experiment Safety Experiment Safety Experiment	Less than 20 kt Less than 20 kt Less than 20 kt	612
22:06:00.04	51.415670	179.179870	130	-4.003	Weapons Related	About 1 Mt	613
14:30:00.14	37.256661	-116.441629	6,534	-2,046	Weapons Related	200 to 1,000 kt	614
14:00:00.04	37.012530	-115.999129	3,976	-389	Safety Experiment	Less than 20 kt	615
19:30:00.04	37.121466	-116.128621	4,589	-865	Weapons Related	11 kt	616
20:00:00.04 20:00:00.04 20:00:00.04 20:00:00.04	37.140159 37.140399 37.136282 37.135291	-116.131374 -116.142708 -116.140839 -116.136825	4,672 4,894 4,839 4,761	-875 -816 -560 -1,025	Weapons Related Weapons Related Weapons Related Weapons Related	16.7 kt (Total)	617
22:01:51.04	37.143270	-116.064717	4,298	-2,050	Weapons Related	110 kt	618
15:15:00.13	37.164582	-116.075702	4,394	-540	Weapons Related	1.7 kt	619
14:52:00.04	37.031147	-116.002910	4,010	-1,292	Weapons Related	20 to 200 kt	620
14:52:00.08	37.014780	-116.023600	3,971	-1,240	Weapons Related	Less than 20 kt	621
17:00:00.04	37.179930	-116.211733	7,540	-1,375	Weapons Effects	Less than 20 kt	622

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
Operation Mandrel – Continued					
623	Culantro-A 12/10/1969 Culantro-B 12/10/1969 Simultaneous, separate holes	LANL LANL	NNSS NNSS	U3hi-a U3hi-b	Shaft Shaft
624	Tun-A ☹ 12/10/1969 Tun-B ☹ 12/10/1969 Tun-C ☹ 12/10/1969 Tun-D ☹ 12/10/1969 Simultaneous, separate holes Tun-B, -C: Accidental and gas sampling release of radioactivity detected onsite only Tun-C, -D: Drillback release of radioactivity detected onsite only	LLNL LLNL LLNL LLNL	NNSS NNSS NNSS NNSS	U10am #1 U10am #2 U10am #3 U10am #4	Shaft Shaft Shaft Shaft
625	Grape A ☹ 12/17/1969	LANL	NNSS	U7s	Shaft
626	Lovage ☹ 12/17/1969	LANL	NNSS	U3fe	Shaft
627	Terrine-White ☹ 12/18/1969 Terrine-Yellow ☹ 12/18/1969 Simultaneous, separate holes Terrine-White, -Yellow: Drillback release of radioactivity detected onsite only	LLNL LLNL	NNSS NNSS	U9bi #1 U9bi #2	Shaft Shaft
628	Fob-Blue 01/23/1970 Fob-Green ☹ 01/23/1970 Fob-Red ☹ 01/23/1970 Simultaneous, separate holes	LLNL LLNL LLNL	NNSS NNSS NNSS	U9ITS Y-27 U9ITS V-27 U9ITS V-24	Shaft Shaft Shaft
629	Ajo ☹ In mined shaft 01/30/1970	LANL	NNSS	U3gd	Shaft
630	Grape B ☹ 02/04/1970	LANL	NNSS	U7v	Shaft
631	Belen ☹ 02/04/1970	LANL	NNSS	U3br	Shaft
632	Labis 02/05/1970	LLNL	NNSS	U10an	Shaft
633	Diana Mist 02/11/1970	LANL/DoD	NNSS	U12n.06	Tunnel
634	Cumarin ☹ 02/25/1970	LANL	NNSS	U3gz	Shaft
635	Yannigan-Blue ☹ 02/26/1970 Yannigan-Red ☹ 02/26/1970 Yannigan-White ☹ 02/26/1970 Simultaneous, separate holes Yannigan-Blue, -Red, -White: Drillback release of radioactivity detected onsite only	LLNL LLNL LLNL	NNSS NNSS NNSS	U2ay #3 U2ay #1 U2ay #2	Shaft Shaft Shaft
636	Cyathus ☹ Drillback release of radioactivity detected onsite only 03/06/1970	LLNL	NNSS	U8b	Shaft
637	Arabis-Blue 03/06/1970 Arabis-Green 03/06/1970 Arabis-Red ☹ 03/06/1970 Simultaneous, separate holes	LLNL LLNL LLNL	NNSS NNSS NNSS	U9ITS Z-26 U9ITS X-28 U9ITS V-26	Shaft Shaft Shaft
638	Jal ☹ 03/19/1970	LANL	NNSS	U3hh	Shaft
639	Shaper ☹ 03/23/1970	LANL	NNSS	U7r	Shaft

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Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Mandrel – Continued

15:00:00.04	37.014671	-116.003735	3,964	-440	Weapons Related	Less than 20 kt	623
15:00:00.04	37.014865	-116.002020	3,967	-490	Weapons Related	Less than 20 kt	
15:30:00.07	37.167656	-116.080143	4,429	-655	Weapons Related	Less than 20 kt	624
15:30:00.07	37.169441	-116.080129	4,434	-636	Weapons Related	Less than 20 kt	
15:30:00.07	37.167642	-116.077912	4,415	-636	Weapons Related	Less than 20 kt	
15:30:00.07	37.169427	-116.077891	4,420	-841	Weapons Related	Less than 20 kt	
15:00:00.04	37.083333	-116.002451	4,268	-1,807	Weapons Related	20 to 200 kt	625
15:15:00.04	37.006540	-116.023673	3,963	-1,240	Weapons Related	Less than 20 kt	626
19:00:00.04	37.120431	-116.035642	4,235	-1,500	Weapons Related	20 to 200 kt	627
19:00:00.04	37.120640	-116.029477	4,278	-1,370	Weapons Related	20 to 200 kt	
16:30:00.21	37.140633	-116.033512	4,264	-330	Weapons Related	Less than 20 kt	628
16:30:00.21	37.140657	-116.037636	4,242	-802	Weapons Related	Less than 20 kt	
16:30:00.21	37.137364	-116.037663	4,232	-872	Weapons Related	Less than 20 kt	
17:00:00.04	37.030776	-116.035631	3,998	-998	Weapons Related	Less than 20 kt	629
17:00:00.04	37.098028	-116.027355	4,253	-1,819	Weapons Related	20 to 200 kt	630
17:00:00.07	37.054972	-116.039711	4,045	-1,381	Weapons Related	20 to 200 kt	631
15:00:00.04	37.163914	-116.039702	4,308	-1,450	Weapons Related	25 kt	632
19:15:00.04	37.201239	-116.206094	7,401	-1,319	Weapons Effects	Less than 20 kt	633
14:28:38.04	37.036627	-116.000460	4,045	-1,340	Weapons Related	20 to 200 kt	634
15:30:00.04	37.113755	-116.066669	4,214	-1,193	Weapons Related	20 to 200 kt	635
15:30:00.04	37.116315	-116.062313	4,214	-1,286	Weapons Related	20 to 200 kt	
15:30:00.04	37.118002	-116.067318	4,227	-1,295	Weapons Related	20 to 200 kt	
14:24:00.94	37.173070	-116.092626	4,527	-964	Weapons Related	8.7 kt	636
15:00:00.21	37.139529	-116.032156	4,275	-330	Safety Experiment	Less than 20 kt	637
15:00:00.21	37.141741	-116.034879	4,256	-849	Weapons Related	Less than 20 kt	
15:00:00.21	37.139559	-116.037645	4,238	-820	Weapons Related	Less than 20 kt	
14:03:30.34	37.001047	-116.023716	3,955	-989	Weapons Related	Less than 20 kt	638
23:05:00.04	37.086185	-116.021966	4,195	-1,839	Weapons Related	20 to 200 kt	639

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type	
Operation Mandrel – Continued						
640	Handley	03/26/1970	LLNL	NNSS	U20m	Shaft
641	Snubber Accidental release of radioactivity detected offsite	04/21/1970	LANL	NNSS	U3ev 2S	Shaft
642	Can-Green ☹	04/21/1970	LLNL	NNSS	U2dd #1	Shaft
	Can-Red ☹ Simultaneous, separate holes	04/21/1970	LLNL	NNSS	U2dd #4	Shaft
643	Beebalm	05/01/1970	LANL	NNSS	U3fn	Shaft
644	Hod-C (Blue)	05/01/1970	LLNL	NNSS	U9ITS Z-25	Shaft
645	Hod-A (Green) ☹	05/01/1970	LLNL	NNSS	U9ITS X-23	Shaft
	Hod-B (Red) ☹ Simultaneous, separate holes Hod-B (Red): Accidental release of radioactivity detected onsite only Hod-A (Green), -B (Red): Drillback release of radioactivity detected onsite only	05/01/1970	LLNL	NNSS	U9ITS X-20	Shaft
646	Mint Leaf Controlled release of radioactivity detected offsite	05/05/1970	LLNL/DoD	NNSS	U12t.01	Tunnel
647	Diamond Dust Nuclear test detection experiment Controlled release of radioactivity detected onsite only	05/12/1970	LANL/DoD	NNSS	U16a.05	Tunnel
648	Cornice-Green ☹	05/15/1970	LLNL	NNSS	U10ap #3	Shaft
	Cornice-Yellow ☹ Simultaneous, separate holes	05/15/1970	LLNL	NNSS	U10ap #1	Shaft
649	Manzanas Accidental release of radioactivity detected onsite only	05/21/1970	LANL	NNSS	U3gr	Shaft
650	Morrone	05/21/1970	LANL	NNSS	U3ei	Shaft
651	Hudson Moon Controlled and accidental release of radioactivity detected onsite only	05/26/1970	LLNL/DoD	NNSS	U12e.12	Tunnel
652	Flask-Green ☹	05/26/1970	LLNL	NNSS	U2az #1	Shaft
	Flask-Red	05/26/1970	LLNL	NNSS	U2az #3	Shaft
	Flask-Yellow Simultaneous, separate holes Flask-Red: Accidental release of radioactivity detected onsite only Flask-Green, -Yellow: Drillback release of radioactivity detected onsite only	05/26/1970	LLNL	NNSS	U2az #2	Shaft
653	Piton-C Accidental release of radioactivity detected onsite only	05/28/1970	LLNL	NNSS	U9ITS AA-25	Shaft

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Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
Operation Mandrel – Continued							
19:00:00.20	37.300424	-116.535014	5,903	-3,967	Weapons Related	More than 1 Mt	640
14:30:00.04	37.054842	-115.988992	4,199	-1,127	Weapons Effects	12.7 kt	641
15:00:00.04 15:00:00.04	37.112323 37.115532	-116.082967 -116.081005	4,243 4,249	-900 -1,310	Weapons Related Weapons Related	20 to 200 kt 20 to 200 kt	642
14:13:00.04	37.059170	-116.029052	4,054	-1,280	Weapons Related	Less than 20 kt	643
14:25:00.00	37.138431	-116.032162	4,273	-330	Safety Experiment	Less than 20 kt	644
14:40:00.17 14:40:00.17	37.136251 37.132952	-116.034924 -116.034948	4,248 4,242	-790 -870	Weapons Related Weapons Related	Less than 20 kt Less than 20 kt	645
15:30:00.17	37.216486	-116.184897	6,957	-1,330	Weapons Effects	Less than 20 kt	646
14:00:00.04	37.010400	-116.2027643	6,321	-830	Vela Uniform	Less than 20 kt	647
13:30:00.17 13:30:00.17	37.161873 37.165879	-116.039722 -116.036360	4,306 4,329	-1,455 -1,280	Weapons Related Weapons Related	20 to 200 kt 20 to 200 kt	648
14:00:00.04	37.012140	-115.992813	4,008	-790	Weapons Related	Less than 20 kt	649
14:15:00.03	37.070762	-116.013873	4,148	-1,584	Weapons Related	20 to 200 kt	650
14:16:00.17	37.182560	-116.214271	7,550	-1,386	Weapons Effects	Less than 20 kt	651
15:00:00.05 15:00:00.05 15:00:00.05	37.113320 37.116147 37.118084	-116.063205 -116.067572 -116.064436	4,192 4,220 4,220	-1,734 -500 -1,100	Plowshare Plowshare Plowshare	105 kt 35 tons 90 tons	652
11:45:00.20	37.138423	-116.030786	4,284	-331	Weapons Related	Less than 20 kt	653

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Mandrel – Continued

654	Piton-A	05/28/1970	LLNL	NNSS	U9ITS Y-30	Shaft
	Piton-B ▾ Simultaneous, separate holes Piton-A: Accidental release of radioactivity detected onsite only	05/28/1970	LLNL	NNSS	U9ITS X-27	Shaft
655	Arnica-Violet ▾	06/26/1970	LLNL	NNSS	U2dd #3	Shaft
	Arnica-Yellow ▾ Simultaneous, separate holes Arnica-Violet: Drillback release of radioactivity detected onsite only	06/26/1970	LLNL	NNSS	U2dd #2	Shaft

Operation Emery

656	Scree-Acajou ▾	10/13/1970	LLNL	NNSS	U9ITS X-24	Shaft
	Scree-Alhambra ▾	10/13/1970	LLNL	NNSS	U9ITS Z-21	Shaft
	Scree-Chamois Simultaneous, separate holes Scree-Acajou: Accidental release of radioactivity detected onsite only Scree-Acajou, -Alhambra: Drillback release of radioactivity detected onsite only	10/13/1970	LLNL	NNSS	U9ITS Z-24	Shaft
657	Tijeras ▾	10/14/1970	LANL	NNSS	U7y	Shaft
658	Truchas-Chacon	10/28/1970	LANL	NNSS	U3hn	Shaft
	Truchas-Chamisal	10/28/1970	LANL	NNSS	U3ho	Shaft
	Truchas-Rodarte ▾ Simultaneous, separate holes Truchas-Chamisal: Accidental release of radioactivity detected onsite only	10/28/1970	LANL	NNSS	U3hm	Shaft
659	Abeytas ▾	11/05/1970	LANL	NNSS	U3gx	Shaft
660	Penasco ▾	11/19/1970	LANL	NNSS	U3hl	Shaft
661	Carrizozo ▾	12/03/1970	LANL	NNSS	U3hr	Shaft
	Corazon Simultaneous, separate holes	12/03/1970	LANL	NNSS	U3ha	Shaft
662	Canjilon	12/16/1970	LANL	NNSS	U3fq	Shaft
663	Artesia ▾	12/16/1970	LANL	NNSS	U7x	Shaft
664	Avens-Alkermes	12/16/1970	LLNL	NNSS	U9ITS U-24	Shaft
	Avens-Andorre ▾	12/16/1970	LLNL	NNSS	U9ITS T-28	Shaft
	Avens-Asmalte ▾	12/16/1970	LLNL	NNSS	U9ITS W-21	Shaft
	Avens-Cream ▾ Simultaneous, separate holes Avens-Cream: Plowshare device development; accidental release of radioactivity detected onsite only	12/16/1970	LLNL	NNSS	U9ITS X-29	Shaft
665	Carpetbag ▾ Drillback release of radioactivity detected onsite only	12/17/1970	LLNL	NNSS	U2dg	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Mandrel – Continued

12:00:00.16	37.143931	-116.033488	4,268	-776	Weapons Related	Less than 20 kt	654
12:00:00.16	37.140640	-116.034881	4,255	-754	Weapons Related	Less than 20 kt	
13:00:00.04	37.117085	-116.085023	4,261	-865	Weapons Related	Less than 20 kt	655
13:00:00.04	37.113881	-116.087003	4,255	-1,015	Weapons Related	Less than 20 kt	

Operation Emery

15:05:00.02	37.137402	-116.034915	4,252	-818	Weapons Related	Less than 20 kt	656
15:05:00.02	37.134039	-116.032198	4,265	-631	Weapons Related	Less than 20 kt	
15:05:00.02	37.137302	-116.032171	4,271	-330	Safety Experiment	Less than 20 kt	
14:30:00.04	37.070608	-116.005994	4,187	-1,839	Weapons Related	20 to 200 kt	657
14:30:00.03	37.013969	-116.018812	3,968	-389	Safety Experiment	Less than 20 kt	658
14:30:00.04	37.013968	-116.018127	3,968	-388	Safety Experiment	Less than 20 kt	
14:30:00.04	37.014762	-116.020175	3,970	-874	Weapons Related	Less than 20 kt	
15:00:00.04	37.029416	-116.012685	3,987	-1,291	Weapons Related	20 to 200 kt	659
15:00:00.04	37.014743	-116.016750	3,969	-889	Weapons Related	Less than 20 kt	660
15:07:00.00	37.006083	-116.040798	3,970	-916	Weapons Related	Less than 20 kt	661
15:07:00.04	37.001952	-116.038777	3,961	-791	Weapons Related	Less than 20 kt	
16:00:00.05	37.072475	-116.025859	4,116	-991	Weapons Related	Less than 20 kt	662
16:00:00.09	37.100121	-116.008824	4,360	-1,591	Weapons Related	20 to 200 kt	663
16:00:00.17	37.137371	-116.039032	4,227	-1,004	Weapons Related	Less than 20 kt	664
16:00:00.17	37.141771	-116.040368	4,236	-1,245	Weapons Related	Less than 20 kt	
16:00:00.17	37.134061	-116.036318	4,234	-1,009	Weapons Related	Less than 20 kt	
16:00:00.17	37.142837	-116.034866	4,260	-961	Plowshare	Less than 20 kt	
16:05:00.16	37.129083	-116.083868	4,302	-2,170	Weapons Related	220 kt	665

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Emery – Continued

666	Baneberry ▼ Accidental release of radioactivity detected offsite	12/18/1970	LLNL	NNSS	U8d	Shaft
667	Embudo ▼	06/16/1971	LANL	NNSS	U3hd	Shaft
668	Dexter	06/23/1971	LANL	NNSS	U3hs	Shaft
669	Laguna ▼	06/23/1971	LANL	NNSS	U3fd	Shaft
670	Harebell ▼ Drillback release of radioactivity detected onsite only	06/24/1971	LLNL	NNSS	U2br	Shaft
671	Camphor Accidental and controlled release of radioactivity detected onsite only	06/29/1971	LLNL/SNL/DoD	NNSS	U12g.10	Tunnel

Operation Grommet

672	Diamond Mine Nuclear test detection experiment	07/01/1971	LANL/DoD	NNSS	U16a.06	Tunnel
673	Miniata ▼ Device development experiment Drillback release of radioactivity detected onsite only	07/08/1971	LLNL	NNSS	U2bu	Shaft
674	Bracken Drillback release of radioactivity detected onsite only	07/09/1971	LLNL	NNSS	U10aq	Shaft
675	Apodaca	07/21/1971	LANL	NNSS	U3gs	Shaft
676	Barranca	08/04/1971	LANL	NNSS	U3he	Shaft
677	Nama-Amarylis Nama-Mephisto Simultaneous, separate holes	08/05/1971 08/05/1971	LLNL LLNL	NNSS NNSS	U9ITS XY-31 U9ITS Z-27	Shaft Shaft
678	Baltic	08/06/1971	LLNL	NNSS	U9ITS S-25	Shaft
679	Algodones ▼	08/18/1971	LANL	NNSS	U3jn	Shaft
680	Frijoles-Deming Frijoles-Espuela Frijoles-Guaje Frijoles-Petaca ▼ Simultaneous, separate holes	09/22/1971 09/22/1971 09/22/1971 09/22/1971	LANL LANL LANL LANL	NNSS NNSS NNSS NNSS	U3jw U3ju U3hf U3hz	Shaft Shaft Shaft Shaft
681	Pederal	09/29/1971	LANL	NNSS	U3hg	Shaft
682	Chantilly ▼	09/29/1971	LLNL	NNSS	U2di	Shaft
683	Cathay	10/08/1971	LLNL	NNSS	U9ch	Shaft
684	Lagoon ▼	10/14/1971	LLNL	NNSS	U10ar	Shaft
685	Cannikin Proof test of warhead for Spartan missile (W71)	11/06/1971	LLNL	Amchitka, Alaska	- - - -	Shaft
686	Diagonal Line Accidental release of radioactivity detected offsite by aircraft only	11/24/1971	LLNL/DoD	NNSS	U11g	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Emery – Continued

15:30:00.20	37.173082	-116.099735	4,574	-912	Weapons Related	10 kt	666
14:50:00.04	37.033134	-116.014538	3,996	-994	Weapons Related	Less than 20 kt	667
14:00:00.04	37.013167	-116.017284	3,968	-394	Safety Experiment	Less than 20 kt	668
15:30:00.04	37.021919	-116.023540	3,981	-1,493	Weapons Related	20 to 200 kt	669
14:00:00.16	37.146647	-116.067709	4,312	-1,702	Weapons Related	20 to 200 kt	670
18:30:00.16	37.176732	-116.212366	7,600	-1,390	Weapons Effects	Less than 20 kt	671

Operation Grommet

14:00:00.04	37.011491	-116.204268	6,310	-873	Vela Uniform	Less than 20 kt	672
14:00:00.08	37.110078	-116.052290	4,179	-1,735	Plowshare	83 kt	673
14:00:00.16	37.164403	-116.033602	4,342	-1,000	Weapons Related	Less than 20 kt	674
13:33:00.05	37.014335	-115.992794	4,009	-792	Weapons Related	Less than 20 kt	675
13:30:00.04	37.026025	-116.020422	3,984	-888	Weapons Related	Less than 20 kt	676
18:07:45.20 18:07:45.20	37.145034 37.140628	-116.034165 -116.032143	4,266 4,275	-895 -800	Weapons Related Weapons Related	Less than 20 kt Less than 20 kt	677
14:31:00.16	37.138482	-116.041768	4,222	-1,351	Weapons Related	Less than 20 kt	678
14:00:00.03	37.057143	-116.037199	4,046	-1,731	Weapons Related	20 to 200 kt	679
14:00:00.04 14:00:00.04 14:00:00.04 14:00:00.04	37.021557 37.022656 37.024354 37.021901	-116.017069 -116.017197 -116.016154 -116.019772	3,977 3,979 3,980 3,980	-492 -490 -843 -741	Safety Experiment Safety Experiment Weapons Related Weapons Related	Less than 20 kt Less than 20 kt Less than 20 kt Less than 20 kt	680
14:00:00.04	37.010988	-116.008219	3,961	-1,242	Weapons Related	Less than 20 kt	681
14:30:00.14	37.124433	-116.087848	4,288	-1,085	Weapons Related	Less than 20 kt	682
14:30:00.15	37.113742	-116.038198	4,226	-1,240	Weapons Related	Less than 20 kt	683
14:30:00.16	37.179733	-116.053961	4,307	-1,000	Weapons Related	Less than 20 kt	684
22:00:00.06	51.470200	179.103800	208	-5,873	Weapons Related	Less than 5 Mt	685
20:15:00.17	36.879181	-115.935571	3,405	-868	Weapons Effects	Less than 20 kt	686

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Grommet – Continued

687	Parnassia ▼	11/30/1971	LLNL	NNSS	U2bc	Shaft
688	Chaenactis ▼	12/14/1971	LLNL	NNSS	U2dl	Shaft
689	Hospah ▼	12/14/1971	LANL	NNSS	U3je	Shaft
690	Yerba ▼	12/14/1971	LANL	NNSS	U1c	Shaft
691	Mescalero	01/05/1972	LANL	NNSS	U3gu	Shaft
692	Cowles ▼	02/03/1972	LANL	NNSS	U3hx	Shaft
693	Dianthus ▼ Gas sampling release of radioactivity detected onsite only	02/17/1972	LLNL	NNSS	U10at	Shaft
694	Sappho Drillback release of radioactivity detected onsite only	03/23/1972	LLNL	NNSS	U2dh #2	Shaft
695	Onaja ▼ Ocate ▼ Simultaneous, separate holes	03/30/1972 03/30/1972	LANL LANL	NNSS NNSS	U3js U3jp	Shaft Shaft
696	Longchamps ▼	04/19/1972	LLNL	NNSS	U2dm	Shaft
697	Jicarilla	04/19/1972	LANL	NNSS	U3jm	Shaft
698	Misty North	05/02/1972	LANL/DoD	NNSS	U12n.05	Tunnel
699	Kara Drillback release of radioactivity detected onsite only	05/11/1972	LLNL	NNSS	U2dh #3	Shaft
700	Zinnia ▼ Drillback release of radioactivity detected onsite only	05/17/1972	LLNL	NNSS	U2dk	Shaft
701	Monero	05/19/1972	LANL	NNSS	U3jq	Shaft
702	Merida ▼ Drillback release of radioactivity detected onsite only	06/07/1972	LLNL	NNSS	U2dn	Shaft
703	Capitan	06/28/1972	LANL	NNSS	U3jj	Shaft
704	Tajique	06/28/1972	LANL	NNSS	U7aa	Shaft
705	Haplopappus	06/28/1972	LLNL	NNSS	U9ITS W-22	Shaft

Operation Toggle

706	Diamond Sculls	07/20/1972	LLNL/DoD	NNSS	U12t.02	Tunnel
707	Atarque ▼ Cementback release of radioactivity detected onsite only	07/25/1972	LANL	NNSS	U3ht	Shaft
708	Cebolla Cuchillo Solano Simultaneous, separate holes Cebolla: Drillback release of radioactivity detected onsite only	08/09/1972 08/09/1972 08/09/1972	LANL LANL LANL	NNSS NNSS NNSS	U3jc U3jt U3jx	Shaft Shaft Shaft
709	Oscuro ▼	09/21/1972	LANL	NNSS	U7z	Shaft
710	Delphinium ▼	09/26/1972	LLNL	NNSS	U2dp	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Grommet – Continued

15:45:00.15	37.160401	-116.071105	4,360	-1,085	Weapons Related	Less than 20 kt	687
21:09:59.16	37.123899	-116.090425	4,291	-1,086	Weapons Related	20 to 200 kt	688
21:10:01.04	37.025802	-116.030016	3,987	-991	Weapons Related	Less than 20 kt	689
21:10:01.04	37.023210	-116.059499	4,031	-1,089	Weapons Related	Less than 20 kt	690
15:10:00.04	37.045609	-116.030413	4,020	-394	Weapons Related	Less than 20 kt	691
21:45:00.04	37.001028	-116.020291	3,955	-990	Weapons Related	Less than 20 kt	692
19:02:00.16	37.165655	-116.057109	4,285	-1,000	Weapons Related	Less than 20 kt	693
18:50:00.16	37.113001	-116.081690	4,241	-649	Weapons Related	Less than 20 kt	694
21:00:00.04 21:00:00.08	37.005427 37.004445	-116.020939 -116.015738	3,960 3,958	-915 -689	Weapons Related Weapons Related	Less than 20 kt Less than 20 kt	695
16:32:00.16	37.121890	-116.084712	4,275	-1,071	Weapons Related	Less than 20 kt	696
16:42:00.05	37.006567	-116.017474	3,960	-486	Weapons Related	Less than 20 kt	697
19:15:00.04	37.207611	-116.209613	7,303	-1,234	Weapons Effects	Less than 20 kt	698
14:00:00.16	37.112445	-116.085367	4,247	-850	Weapons Related	Less than 20 kt	699
14:10:00.16	37.120509	-116.088767	4,279	-1,059	Weapons Related	Less than 20 kt	700
17:00:00.05	37.064656	-116.002614	4,175	-1,763	Weapons Related	Less than 20 kt	701
15:20:00.16	37.115841	-116.086199	4,258	-670	Weapons Related	Less than 20 kt	702
14:41:00.19	36.992556	-116.023017	3,946	-441	Weapons Related	Less than 20 kt	703
16:30:00.07	37.069546	-115.992974	4,267	-1,090	Weapons Related	Less than 20 kt	704
16:30:03.16	37.135156	-116.036134	4,237	-605	Weapons Related	Less than 20 kt	705

Operation Toggle

17:16:00.16	37.214484	-116.184243	7,020	-1,391	Weapons Effects	Less than 20 kt	706
13:30:00.06	37.012445	-116.015917	3,967	-966	Weapons Related	Less than 20 kt	707
13:31:10.04 13:31:10.04 13:31:10.04	37.007141 37.003705 37.003153	-116.019897 -116.019923 -116.017568	3,962 3,957 3,957	-941 -652 -440	Weapons Related Weapons Related Safety Experiment	Less than 20 kt Less than 20 kt Less than 20 kt	708
15:30:00.19	37.082010	-116.037435	4,108	-1,838	Weapons Related	20 to 200 kt	709
14:30:00.16	37.121323	-116.086603	4,276	-970	Weapons Related	15 kt	710

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Toggle – Continued

711	Akbar ▼	11/09/1972	LLNL	NNSS	U10ax	Shaft
712	Arsenate Gas sampling release of radioactivity detected onsite only	11/09/1972	LLNL	NNSS	U9ci	Shaft
713	Canna-Limoges Canna-Umbrinus Simultaneous, same hole	11/17/1972 11/17/1972	LLNL LLNL	NNSS NNSS	U9ITS YZ-26 U9ITS YZ-26	Shaft Shaft
714	Tuloso	12/12/1972	LANL	NNSS	U3gi	Shaft
715	Solanum Drillback release of radioactivity detected onsite only	12/14/1972	LLNL	NNSS	U9ITS W-24.5	Shaft
716	Flax-Source ▼	12/21/1972	LLNL	NNSS	U2dj	Shaft
717	Flax-Backup ▼ Flax-Test ▼ Simultaneous, same hole	12/21/1972 12/21/1972	LLNL LLNL	NNSS NNSS	U2dj U2dj	Shaft Shaft
718	Alumroot	02/14/1973	LLNL	NNSS	U9cj	Shaft
719	Miera ▼ Cementback release of radioactivity detected onsite only	03/08/1973	LANL	NNSS	U7ad	Shaft
720	Gazook ▼ Drillback release of radioactivity detected onsite only	03/23/1973	LLNL	NNSS	U2do	Shaft
721	Natoma	04/05/1973	LLNL	NNSS	U10aw	Shaft
722	Angus ▼ Velarde ▼ Simultaneous, separate holes Angus: Drillback release of radioactivity detected onsite only Velarde: Cementback and drillback release of radioactivity detected onsite only	04/25/1973 04/25/1973	LANL LANL	NNSS NNSS	U3jg U3jk	Shaft Shaft
723	Colmor ▼ Cementback release of radioactivity detected onsite only	04/26/1973	LANL	NNSS	U3hv	Shaft
724	Starwort ▼ Drillback release of radioactivity detected onsite only	04/26/1973	LLNL	NNSS	U2bs	Shaft
725	Mesita Cementback release of radioactivity detected onsite only	05/09/1973	LANL	NNSS	U3jd	Shaft
726	Rio Blanco-1 Rio Blanco-2 Rio Blanco-3 Simultaneous, same hole Joint Government/industry gas stimulation experiment	05/17/1973 05/17/1973 05/17/1973	LLNL LLNL LLNL		near Meeker, Colorado near Meeker, Colorado near Meeker, Colorado	---- ---- ---- Shaft Shaft Shaft

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Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Toggle – Continued

15:15:00.16	37.161994	-116.034024	4,337	-875	Weapons Related	Less than 20 kt	711
18:15:00.16	37.121398	-116.033196	4,249	-821	Weapons Related	Less than 20 kt	712
18:00:00.16 18:00:00.16	37.139535 37.139535	-116.033233 -116.033233	4,265 4,265	-700 -600	Safety Experiment Weapons Related	Less than 20 kt Less than 20 kt	713
16:30:00.04	37.031253	-116.022094	3,991	-889	Weapons Related	Less than 20 kt	714
15:30:00.16	37.138037	-116.035596	4,246	-600	Weapons Related	Less than 20 kt	715
20:15:00.24	37.139909	-116.084124	4,341	-2,260	Weapons Related	Less than 20 kt	716
20:15:24.35 20:15:24.35	37.139909 37.139909	-116.084124 -116.084124	4,341 4,341	-1,460 -1,430	Weapons Effects Weapons Effects	Less than 20 kt 20 to 200 kt	717
15:30:00.16	37.147045	-116.050962	4,237	-600	Weapons Related	Less than 20 kt	718
16:10:00.19	37.103545	-116.027600	4,285	-1,865	Weapons Related	20 to 200 kt	719
20:15:00.17	37.117223	-116.087903	4,268	-1,070	Weapons Related	Less than 20 kt	720
14:50:00.16	37.177828	-116.054766	4,297	-800	Weapons Related	Less than 20 kt	721
22:25:00.03 22:25:00.07	37.004786 36.993607	-116.029336 -116.021912	3,962 3,948	-1,485 -908	Weapons Related Weapons Related	Less than 20 kt Less than 20 kt	722
15:15:00.04	37.012101	-116.020835	3,968	-806	Weapons Related	Less than 20 kt	723
17:15:00.17	37.122999	-116.059385	4,226	-1,850	Weapons Related	90 kt	724
13:30:00.04	37.006221	-116.016942	3,960	-490	Weapons Related	Less than 20 kt	725
16:00:00.12 16:00:00.12 16:00:00.12	39.793250 39.793250 39.793250	-108.367210 -108.367210 -108.367210	6,630 6,630 6,630	-5,840 -6,230 -6,690	Plowshare Plowshare Plowshare	33 kt 33 kt 33 kt	726

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Toggle – Continued

727	Cabresto	05/24/1973	LANL	NNSS	U7h	Shaft
728	Kashan ☹ Drillback release of radioactivity detected onsite only	05/24/1973	LLNL	NNSS	U10av	Shaft
729	Dido Queen	06/05/1973	LLNL/DoD	NNSS	U12e.14	Tunnel
730	Almendro	06/06/1973	LANL	NNSS	U19v	Shaft
731	Potrillo ☹ Cementback release of radioactivity detected onsite only	06/21/1973	LANL	NNSS	U7af	Shaft
732	Portulaca ☹ Drillback release of radioactivity detected onsite only	06/28/1973	LLNL	NNSS	U2bv	Shaft
733	Silene	06/28/1973	LLNL	NNSS	U9ck	Shaft

Operation Arbor

734	Polygonum	10/02/1973	LLNL	NNSS	U2by	Shaft
735	Waller Drillback and gas sampling release of radioactivity detected onsite only	10/02/1973	LLNL	NNSS	U2bz	Shaft
736	Husky Ace	10/12/1973	LANL/DoD	NNSS	U12n.07	Tunnel
737	Bernal ☹ Cementback release of radioactivity detected onsite only	11/28/1973	LANL	NNSS	U3jy	Shaft
738	Pajara ☹ Cementback release of radioactivity detected onsite only	12/12/1973	LANL	NNSS	U3ji	Shaft
739	Seafoam Gas sampling release of radioactivity detected onsite only	12/13/1973	LLNL	NNSS	U2ea	Shaft
740	Spar	12/19/1973	LANL	NNSS	U3jr	Shaft
741	Elida Cementback release of radioactivity detected onsite only	12/19/1973	LANL	NNSS	U3hy	Shaft
742	Pinedrops-Bayou Pinedrops-Sloat Pinedrops-Tawny Simultaneous, same hole Pinedrops-Bayou: Drillback release of radioactivity detected onsite only	01/10/1974 01/10/1974 01/10/1974	LLNL LLNL LLNL	NNSS NNSS NNSS	U10as U10as U10as	Shaft Shaft Shaft
743	Latir ☹	02/27/1974	LANL	NNSS	U4d	Shaft
744	Hulsea Drillback release of radioactivity detected onsite only	03/14/1974	LLNL	NNSS	U2bx	Shaft
745	Sapello	04/12/1974	LANL	NNSS	U3ge	Shaft
746	Potrero ☹	04/23/1974	LLNL	NNSS	U2eb	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Toggle – Continued

13:30:00.04	37.078000	-116.031637	4,118	-649	Weapons Related	Less than 20 kt	727
13:30:00.16	37.162182	-116.056845	4,278	-870	Weapons Related	Less than 20 kt	728
17:00:00.17	37.184978	-116.215970	7,461	-1,284	Weapons Effects	Less than 20 kt	729
13:00:00.08	37.245010	-116.346905	6,876	-3,499	Weapons Related	200 to 1,000 kt	730
14:45:00.08	37.091989	-116.028092	4,207	-1,860	Weapons Related	20 to 200 kt	731
19:15:12.40	37.148376	-116.086726	4,388	-1,528	Weapons Related	20 to 200 kt	732
19:45:00.16	37.114860	-116.041790	4,202	-650	Weapons Related	Less than 20 kt	733

Operation Arbor

14:30:00.17	37.158739	-116.073860	4,366	-700	Weapons Related	Less than 20 kt	734
15:15:00.16	37.153864	-116.068579	4,333	-1,020	Weapons Related	Less than 20 kt	735
17:00:00.08	37.200338	-116.204063	7,430	-1,364	Weapons Effects	Less than 20 kt	736
15:30:00.08	37.010944	-116.025345	3,969	-936	Weapons Related	Less than 20 kt	737
19:00:00.10	36.991440	-116.024995	3,945	-913	Weapons Related	Less than 20 kt	738
15:17:00.17	37.161349	-116.073925	4,374	-650	Weapons Related	Less than 20 kt	739
17:30:00.04	37.005723	-116.019762	3,960	-487	Safety Experiment	Less than 20 kt	740
19:16:00.11	37.001093	-116.032277	3,955	-1,251	Weapons Related	Less than 20 kt	741
15:38:00.17 15:38:00.17 15:38:00.17	37.174076 37.174076 37.174076	-116.051669 -116.051669 -116.051669	4,298 4,298 4,298	-1,125 -700 -925	Weapons Related Weapons Related Weapons Related	Less than 20 kt Less than 20 kt Less than 20 kt	742
17:00:00.09	37.104210	-116.053709	4,167	-2,102	Weapons Related	20 to 200 kt	743
17:00:00.17	37.155082	-116.064966	4,319	-640	Weapons Related	Less than 20 kt	744
15:15:00.08	37.014894	-116.045008	3,989	-593	Weapons Related	Less than 20 kt	745
15:13:00.16	37.159923	-116.077282	4,387	-692	Weapons Related	Less than 20 kt	746

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type	
Operation Arbor – Continued						
747	Plomo	05/01/1974	LANL	NNSS	U3ff	Shaft
748	Jib	05/08/1974	LANL	NNSS	U3hb	Shaft
749	Grove ◡ Drillback release of radioactivity detected onsite only	05/22/1974	LLNL	NNSS	U2ds	Shaft
750	Fallon ◡ Drillback release of radioactivity detected onsite only	05/23/1974	LLNL/UK	NNSS	U2dv	Shaft
751	Jara ◡ Cementback release of radioactivity detected onsite only	06/06/1974	LANL	NNSS	U3hp	Shaft
752	Ming Blade	06/19/1974	LANL/DoD	NNSS	U12n.08	Tunnel
Operation Bedrock						
753	Escabosa ◡	07/10/1974	LANL	NNSS	U7ac	Shaft
754	Crestlake-Briar ◡	07/18/1974	LLNL	NNSS	U2dw	Shaft
	Crestlake-Tansan ◡ Simultaneous, same hole Crestlake-Briar, -Tansan: Drillback release of radioactivity detected onsite only	07/18/1974	LLNL	NNSS	U2dw	Shaft
755	Puye ◡ Drillback and cementback release of radioactivity detected onsite only	08/14/1974	LANL	NNSS	U3jl	Shaft
756	Portmanteau ◡	08/30/1974	LLNL	NNSS	U2ax	Shaft
757	Pratt ◡	09/25/1974	LANL	NNSS	U3hq	Shaft
758	Trumbull	09/26/1974	LLNL	NNSS	U4aa	Shaft
759	Stanyan ◡	09/26/1974	LLNL	NNSS	U2aw	Shaft
760	Estaca	10/17/1974	LANL	NNSS	U3ja	Shaft
761	Hybla Fair Controlled release of radioactivity detected onsite only	10/28/1974	LLNL/DoD	NNSS	U12n.09	Tunnel
762	Temescal Gas sampling release of radioactivity detected onsite only	11/02/1974	LLNL	NNSS	U4ab	Shaft
763	Puddle	11/26/1974	LANL	NNSS	U3kg	Shaft
764	Keel ◡	12/16/1974	LANL	NNSS	U3hu	Shaft
765	Portola-Larkin	02/06/1975	LLNL	NNSS	U10bb	Shaft
	Portola Simultaneous, same hole Portola-Larkin, Portola: Drillback release of radioactivity detected onsite only	02/06/1975	LLNL	NNSS	U10bb	Shaft
766	Teleme ◡	02/06/1975	LLNL	NNSS	U9cl	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Arbor – Continued

14:02:00.21	37.031057	-115.986466	4,114	-490	Weapons Related	Less than 20 kt	747
16:55:00.09	37.000933	-116.002487	3,951	-592	Weapons Related	Less than 20 kt	748
14:15:00.17	37.114758	-116.075575	4,236	-1,031	Weapons Related	Less than 20 kt	749
13:38:30.16	37.124448	-116.079753	4,274	-1,530	Joint US-UK	20 to 200 kt	750
14:40:00.08	37.003797	-116.024378	3,960	-1,240	Weapons Related	Less than 20 kt	751
16:00:00.08	37.210258	-116.208127	7,344	-1,272	Weapons Effects	Less than 20 kt	752

Operation Bedrock

16:00:00.09	37.074984	-116.032691	4,102	-2,095	Weapons Related	20 to 200 kt	753
14:00:01.20	37.119205	-116.086002	4,269	-1,226	Weapons Related	Less than 20 kt	754
14:00:01.20	37.119205	-116.086002	4,269	-891	Weapons Related	Less than 20 kt	
14:00:00.11	37.023366	-116.037231	3,987	-1,411	Weapons Related	Less than 20 kt	755
15:00:00.16	37.152431	-116.084203	4,397	-2,150	Weapons Related	20 to 200 kt	756
14:00:00.08	37.012074	-116.031159	3,970	-1,030	Weapons Related	Less than 20 kt	757
14:30:00.16	37.093157	-116.095630	4,251	-863	Weapons Related	Less than 20 kt	758
15:05:00.17	37.132581	-116.069261	4,271	-1,880	Weapons Related	20 to 200 kt	759
17:13:00.12	37.006354	-116.015722	3,959	-1,053	Weapons Related	Less than 20 kt	760
15:00:00.17	37.201085	-116.204811	7,394	-1,325	Weapons Effects	Less than 20 kt	761
15:30:00.16	37.093142	-116.092544	4,234	-862	Weapons Related	Less than 20 kt	762
15:00:00.90	37.000983	-116.012073	4,002	-604	Safety Experiment	Less than 20 kt	763
17:30:00.09	37.011253	-116.018496	3,966	-1,000	Weapons Related	Less than 20 kt	764
15:30:00.16	37.178360	-116.052424	4,305	-901	Weapons Related	Less than 20 kt	765
15:30:00.17	37.178360	-116.052424	4,305	-651	Weapons Related	Less than 20 kt	
16:13:00.17	37.114067	-116.021904	4,354	-1,001	Weapons Related	Less than 20 kt	766

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Bedrock – Continued

767	Bilge Cementback release of radioactivity detected onsite only	02/19/1975	LANL	NNSS	U3kc	Shaft
768	Topgallant ▼	02/28/1975	LANL	NNSS	U4e	Shaft
769	Cabrillo ▼ Drillback release of radioactivity detected onsite only	03/07/1975	LLNL	NNSS	U2dr	Shaft
770	Dining Car	04/05/1975	LLNL/DoD	NNSS	U12e.18	Tunnel
771	Edam ▼	04/24/1975	LLNL	NNSS	U2dy	Shaft
772	Obar	04/30/1975	LANL	NNSS	U7ag	Shaft
773	Tybo	05/14/1975	LLNL	NNSS	U20y	Shaft
774	Stilton Test also known as Stilton/Hushed Echo	06/03/1975	LLNL/DoD	NNSS	U20p	Shaft
775	Mizzen ▼	06/03/1975	LANL	NNSS	U7ah	Shaft
776	Alviso	06/11/1975	LLNL	NNSS	U2du	Shaft
777	Futtock	06/18/1975	LANL	NNSS	U3eh	Shaft
778	Mast	06/19/1975	LANL	NNSS	U19u	Shaft
779	Camembert	06/26/1975	LLNL	NNSS	U19q	Shaft

Operation Anvil

780	Marsh ▼	09/06/1975	LANL	NNSS	U3kb	Shaft
781	Husky Pup	10/24/1975	LLNL/DoD	NNSS	U12t.03	Tunnel
782	Kasseri Drillback release of radioactivity detected onsite only	10/28/1975	LLNL	NNSS	U20z	Shaft
783	Deck ▼	11/18/1975	LANL	NNSS	U3kd	Shaft
784	Inlet	11/20/1975	LANL	NNSS	U19f	Shaft
785	Leyden	11/26/1975	LLNL	NNSS	U9cm	Shaft
786	Chiberta ▼	12/20/1975	LLNL	NNSS	U2ek	Shaft
787	Muenster	01/03/1976	LLNL	NNSS	U19e	Shaft
788	Keelson ▼	02/04/1976	LANL	NNSS	U7ai	Shaft
789	Esrom ▼ Drillback release of radioactivity detected onsite only	02/04/1976	LLNL	NNSS	U7ak	Shaft
790	Fontina	02/12/1976	LLNL	NNSS	U20f	Shaft
791	Cheshire	02/14/1976	LLNL	NNSS	U20n	Shaft
792	Shallows ▼ Cementback release of radioactivity detected onsite only	02/26/1976	LANL	NNSS	U3jf	Shaft
793	Estuary	03/09/1976	LANL	NNSS	U19g	Shaft
794	Colby Mudpit release of radioactivity detected onsite only	03/14/1976	LLNL	NNSS	U20aa	Shaft

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Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Bedrock – Continued

20:10:00.22	37.002155	-116.025429	3,957	-1,044	Weapons Related	Less than 20 kt	767
15:15:00.09	37.106153	-116.057123	4,173	-2,340	Weapons Related	20 to 200 kt	768
15:00:00.17	37.133964	-116.085117	4,313	-1,970	Weapons Related	20 to 200 kt	769
19:45:00.19	37.187868	-116.214751	7,430	-1,257	Weapons Effects	Less than 20 kt	770
14:10:00.17	37.115640	-116.088262	4,263	-1,350	Weapons Related	20 to 200 kt	771
15:00:01.90	37.108805	-116.029665	4,286	-1,866	Weapons Related	20 to 200 kt	772
14:00:00.16	37.220730	-116.475069	6,257	-2,510	Weapons Related	200 to 1,000 kt	773
14:20:00.17	37.340002	-116.523770	5,560	-2,400	Weapons Related	20 to 200 kt	774
14:40:00.11	37.094783	-116.036976	4,180	-2,090	Weapons Related	20 to 200 kt	775
13:00:00.17	37.111732	-116.074569	4,225	-600	Safety Experiment	Less than 20 kt	776
11:49:00.09	37.065592	-116.022829	4,094	-612	Safety Experiment	Less than 20 kt	777
13:00:00.09	37.350295	-116.321103	6,873	-2,988	Weapons Related	200 to 1,000 kt	778
12:30:00.16	37.278875	-116.369471	6,758	-4,304	Weapons Related	200 to 1,000 kt	779

Operation Anvil

17:00:00.11	37.023603	-116.029178	3,983	-1,402	Weapons Related	Less than 20 kt	780
17:11:26.09	37.221588	-116.180561	6,769	-1,076	Weapons Effects	Less than 20 kt	781
14:30:00.16	37.289997	-116.412434	6,509	-4,150	Weapons Related	200 to 1,000 kt	782
15:30:00.11	37.020263	-116.021499	3,958	-1,070	Weapons Related	Less than 20 kt	783
15:00:00.09	37.224903	-116.368447	6,734	-2,685	Weapons Related	200 to 1,000 kt	784
15:30:00.16	37.117214	-116.019751	4,363	-1,070	Weapons Related	Less than 20 kt	785
20:00:00.16	37.127602	-116.062439	4,237	-2,350	Weapons Related	20 to 200 kt	786
19:15:00.16	37.296498	-116.334072	6,919	-4,765	Weapons Related	200 to 1,000 kt	787
14:20:00.11	37.069209	-116.031028	4,084	-2,098	Weapons Related	20 to 200 kt	788
14:40:00.16	37.106546	-116.038295	4,216	-2,149	Weapons Related	20 to 200 kt	789
14:45:00.16	37.271354	-116.489338	6,117	-3,997	Weapons Related	200 to 1,000 kt	790
11:30:00.16	37.242582	-116.421101	6,477	-3,829	Weapons Related	200 to 500 kt	791
14:50:00.09	37.028476	-116.016633	3,987	-803	Weapons Related	Less than 20 kt	792
14:00:00.09	37.309910	-116.365105	6,734	-2,811	Weapons Related	200 to 500 kt	793
12:30:00.16	37.305939	-116.472375	6,337	-4,174	Weapons Related	500 to 1,000 kt	794

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Anvil – Continued

795	Pool	03/17/1976	LANL	NNSS	U19p	Shaft
796	Strait ▼	03/17/1976	LANL	NNSS	U4a	Shaft
797	Mighty Epic	05/12/1976	LLNL/DoD	NNSS	U12n.10	Tunnel
798	Rivoli Accidental release of radioactivity detected onsite only	05/20/1976	LLNL	NNSS	U2eg	Shaft
799	Billet Drillback release of radioactivity detected onsite only	07/27/1976	LANL	NNSS	U7an	Shaft
800	Banon ▼ Drillback release of radioactivity detected onsite only	08/26/1976	LLNL/UK	NNSS	U2dz	Shaft

Operation Fulcrum

801	Gouda	10/06/1976	LLNL	NNSS	U2ef	Shaft
802	Sprit	11/10/1976	LANL	NNSS	U3hc	Shaft
803	Chevre ▼	11/23/1976	LLNL	NNSS	U10ay	Shaft
804	Redmud ▼	12/08/1976	LANL	NNSS	U7ab	Shaft
805	Asiago ▼	12/21/1976	LLNL	NNSS	U2ar	Shaft
806	Sutter	12/21/1976	LLNL	NNSS	U2bw	Shaft
807	Rudder ▼	12/28/1976	LANL	NNSS	U7ajS	Shaft
808	Oarlock ▼ Cove ▼ Simultaneous, separate holes	02/16/1977 02/16/1977	LANL LANL	NNSS NNSS	U3km U3ki	Shaft Shaft
809	Dofino Dofino-Lawton Simultaneous, same hole Dofino, -Dofino-Lawton: Drillback release of radioactivity detected onsite only	03/08/1977 03/08/1977	LLNL LLNL	NNSS NNSS	U10ba U10ba	Shaft Shaft
810	Marsilly ▼ Drillback release of radioactivity detected onsite only	04/05/1977	LLNL	NNSS	U2el	Shaft
811	Bulkhead	04/27/1977	LANL	NNSS	U7am	Shaft
812	Crewline	05/25/1977	LANL	NNSS	U7ap	Shaft
813	Forefoot	06/02/1977	LANL	NNSS	U3kf	Shaft
814	Carnelian ▼ Drillback release of radioactivity detected onsite only	07/28/1977	LLNL	NNSS	U4af	Shaft
815	Strake ▼	08/04/1977	LANL	NNSS	U7ae	Shaft
816	Gruyere Gruyere-Gradino Simultaneous, same hole Gruyere-Gradino: Drillback release of radioactivity detected onsite only	08/16/1977 08/16/1977	LLNL LLNL	NNSS NNSS	U9cg U9cg	Shaft Shaft

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Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Anvil – Continued

14:15:00.09	37.255836	-116.329461	6,899	-2,891	Weapons Related	200 to 500 kt	795
14:45:00.09	37.107238	-116.053345	4,169	-2,567	Weapons Related	200 to 500 kt	796
19:50:00.17	37.209010	-116.213330	7,384	-1,306	Weapons Effects	Less than 20 kt	797
17:30:00.16	37.137153	-116.067448	4,284	-656	Weapons Related	Less than 20 kt	798
20:30:00.08	37.075322	-116.044686	4,100	-2,088	Weapons Related	20 to 150 kt	799
14:30:00.17	37.124960	-116.082867	4,273	-1,761	Joint US-UK	20 to 150 kt	800

Operation Fulcrum

14:30:00.16	37.134514	-116.063146	4,260	-656	Weapons Related	Less than 20 kt	801
14:58:00.08	37.035902	-116.018283	4,000	-601	Weapons Related	Less than 20 kt	802
15:15:00.16	37.171658	-116.053542	4,281	-1,040	Weapons Related	Less than 20 kt	803
14:49:30.08	37.079216	-116.002487	4,251	-1,400	Weapons Related	Less than 20 kt	804
15:09:00.17	37.123863	-116.068328	4,239	-1,083	Weapons Related	Less than 20 kt	805
15:58:00.16	37.151851	-116.064305	4,312	-657	Weapons Related	Less than 20 kt	806
18:00:00.08	37.100446	-116.037331	4,205	-2,095	Weapons Related	20 to 150 kt	807
17:53:00.07	37.013438	-116.029435	3,970	-1,042	Weapons Related	Less than 20 kt	808
17:53:00.16	37.006589	-116.032235	3,963	-1,098	Weapons Related	Less than 20 kt	
14:24:00.16	37.176147	-116.053825	4,296	-600	Weapons Related	Less than 20 kt	809
14:24:00.16	37.176147	-116.053825	4,296	-926	Weapons Related	Less than 20 kt	
15:00:00.17	37.120187	-116.063150	4,220	-2,260	Weapons Related	20 to 150 kt	810
15:00:00.08	37.094739	-116.028751	4,219	-1,950	Weapons Related	20 to 150 kt	811
17:00:00.08	37.094280	-116.045731	4,148	-1,851	Weapons Related	20 to 150 kt	812
17:15:00.10	37.054895	-116.025832	4,047	-635	Weapons Related	Less than 20 kt	813
14:07:00.16	37.097534	-116.091825	4,238	-684	Weapons Related	Less than 20 kt	814
16:40:00.07	37.086522	-116.007738	4,266	-1,698	Weapons Related	20 to 150 kt	815
14:41:00.16	37.145117	-116.049948	4,232	-680	Weapons Related	Less than 20 kt	816
14:41:00.16	37.145117	-116.049948	4,232	-1,050	Weapons Related	Less than 20 kt	

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Fulcrum – Continued

817	Flotost ☹ Drillback release of radioactivity detected onsite only	08/16/1977	LLNL	NNSS	U2ao	Shaft
818	Scupper	08/19/1977	LANL	NNSS	U3hj	Shaft
819	Scantling ☹	08/19/1977	LANL	NNSS	U4h	Shaft
820	Ebbtide ☹	09/15/1977	LANL	NNSS	U3kt	Shaft
821	Coulommiers ☹ Drillback release of radioactivity detected onsite only	09/27/1977	LLNL	NNSS	U2ei	Shaft

Operation Cresset

822	Bobstay ☹ Cementback release of radioactivity detected onsite only	10/26/1977	LANL	NNSS	U3jb	Shaft
823	Hybla Gold Controlled release of radioactivity detected onsite only	11/01/1977	LANL/DoD	NNSS	U12e.20	Tunnel
824	Sandreef ☹	11/09/1977	LANL	NNSS	U7aq	Shaft
825	Seamount☹	11/17/1977	LANL	NNSS	U3kp	Shaft
826	Rib ☹	12/14/1977	LANL	NNSS	U3jv	Shaft
827	Farallones ☹ Drillback release of radioactivity detected onsite only	12/14/1977	LLNL	NNSS	U2fa	Shaft
828	Campos Drillback release of radioactivity detected onsite only	02/13/1978	LLNL	NNSS	U9cp	Shaft
829	Reblochon ☹ Drillback release of radioactivity detected onsite only	02/23/1978	LLNL	NNSS	U2en	Shaft
830	Karab ☹ Drillback release of radioactivity detected onsite only	03/16/1978	LLNL	NNSS	U4ah	Shaft
831	Topmast	03/23/1978	LANL	NNSS	U7ay	Shaft
832	Iceberg ☹	03/23/1978	LANL	NNSS	U4g	Shaft
833	Fondutta	04/11/1978	LLNL/UK	NNSS	U19zS	Shaft
834	Backbeach	04/11/1978	LANL	NNSS	U19x	Shaft
835	Asco	04/25/1978	LLNL	NNSS	U10bc	Shaft
836	Transom No nuclear yield Device was destroyed by Hearts detonation on 09/06/1979	05/10/1978	LANL	NNSS	U4f	Shaft
837	Jackpots	06/01/1978	LANL	NNSS	U3kj	Shaft
838	Satz ☹ Gas sampling release of radioactivity detected onsite only	07/07/1978	LLNL	NNSS	U2dq	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Fulcrum – Continued

15:49:00.17	37.146672	-116.063983	4,301	-903	Weapons Related	Less than 20 kt	817
17:32:00.10	37.017575	-116.032483	3,976	-1,475	Weapons Related	Less than 20 kt	818
17:55:00.10	37.109987	-116.055377	4,175	-2,300	Weapons Related	20 to 150 kt	819
14:36:30.08	37.032743	-116.044006	4,005	-1,245	Weapons Related	Less than 20 kt	820
14:00:00.16	37.151117	-116.068429	4,327	-1,740	Weapons Related	20 to 150 kt	821

Operation Cresset

14:15:00.08	37.007554	-116.017572	3,961	-1,251	Weapons Related	Less than 20 kt	822
18:06:00.07	37.187733	-116.213832	7,434	-1,263	Weapons Effects	Less than 20 kt	823
22:00:00.08	37.072058	-116.050879	4,094	-2,299	Weapons Related	20 to 150 kt	824
19:30:00.08	37.020556	-116.025943	3,979	-1,214	Weapons Related	Less than 20 kt	825
15:00:00.17	37.017504	-116.018778	3,973	-698	Weapons Related	Less than 20 kt	826
15:30:00.07	37.135821	-116.086900	4,322	-2,189	Weapons Related	20 to 150 kt	827
21:53:00.16	37.126070	-116.032608	4,253	-1,049	Weapons Related	Less than 20 kt	828
17:00:00.16	37.123631	-116.064701	4,226	-2,160	Weapons Related	20 to 150 kt	829
15:00:00.07	37.085125	-116.082490	4,182	-1,086	Weapons Related	Less than 20 kt	830
16:30:00.11	37.098815	-116.020490	4,296	-1,502	Weapons Related	Less than 20 kt	831
16:30:00.20	37.101729	-116.052018	4,152	-2,101	Weapons Related	20 to 150 kt	832
15:30:00.16	37.299575	-116.327584	6,888	-2,077	Joint US-UK	20 to 150 kt	833
17:45:00.07	37.233439	-116.369355	6,781	-2,204	Weapons Related	20 to 150 kt	834
14:35:00.16	37.154518	-116.035630	4,305	-600	Safety Experiment	Less than 20 kt	835
15:00:00.07	37.087728	-116.053499	4,129	-2,100	Weapons Related	Zero	836
17:00:00.08	37.020598	-116.032814	3,979	-998	Weapons Related	Less than 20 kt	837
14:00:00.17	37.111749	-116.078002	4,232	-1,033	Weapons Related	Less than 20 kt	838

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type	
Operation Cresset – Continued						
839	Lowball ▼	07/12/1978	LANL	NNSS	U7av	Shaft
840	Panir	08/31/1978	LLNL	NNSS	U19yS	Shaft
841	Diablo Hawk	09/13/1978	LLNL/DoD	NNSS	U12n.10a	Tunnel
842	Cremino Cremino-Caerphilly Simultaneous, same hole	09/27/1978	LLNL	NNSS	U8e	Shaft
		09/27/1978	LLNL	NNSS	U8e	Shaft
843	Draughts ▼	09/27/1978	LANL	NNSS	U7al	Shaft
844	Rummy ▼	09/27/1978	LANL	NNSS	U7au	Shaft
Operation Quicksilver						
845	Emmenthal	11/02/1978	LLNL	NNSS	U19t	Shaft
846	Quargel ▼ Drillback release of radioactivity detected onsite only	11/18/1978	LLNL/UK	NNSS	U2fb	Shaft
847	Concentration ▼	12/01/1978	LANL	NNSS	U3kn	Shaft
848	Farm Gas sampling release of radioactivity detected onsite only	12/16/1978	LLNL	NNSS	U20ab	Shaft
849	Baccarat ▼	01/24/1979	LANL	NNSS	U7ax	Shaft
850	Quinella ▼	02/08/1979	LANL	NNSS	U4l	Shaft
851	Kloster ▼ Drillback release of radioactivity detected onsite only	02/15/1979	LLNL	NNSS	U2eo	Shaft
852	Memory ▼	03/14/1979	LANL	NNSS	U3kq	Shaft
853	Freezeout ▼	05/11/1979	LANL	NNSS	U3kw	Shaft
854	Pepato Drillback release of radioactivity detected onsite only	06/11/1979	LLNL	NNSS	U20ad	Shaft
855	Chess	06/20/1979	LANL	NNSS	U7at	Shaft
856	Fajy ▼ Drillback and gas sampling release of radioactivity detected onsite only	06/28/1979	LLNL	NNSS	U2fc	Shaft
857	Burzet ▼ Gas sampling release of radioactivity detected onsite only	08/03/1979	LLNL	NNSS	U4ai	Shaft
858	Offshore ▼	08/08/1979	LANL	NNSS	U3ks	Shaft
859	Nessel ▼ Gas sampling release of radioactivity detected onsite only	08/29/1979	LLNL/UK	NNSS	U2ep	Shaft
860	Hearts ▼ Detonation destroyed undetonated Transom device from 05/10/1978	09/06/1979	LANL	NNSS	U4n	Shaft
861	Pera ▼	09/08/1979	LLNL	NNSS	U10bd	Shaft
862	Sheepshead	09/26/1979	LANL	NNSS	U19aa	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Cresset – Continued

17:00:00.08	37.078621	-116.044656	4,109	-1,853	Weapons Related	20 to 150 kt	839
14:00:00.16	37.275877	-116.358226	6,694	-2,234	Weapons Related	20 to 150 kt	840
15:15:00.16	37.208750	-116.211642	7,346	-1,273	Weapons Effects	Less than 20 kt	841
16:30:00.17	37.170963	-116.088036	4,488	-688	Weapons Related	Less than 20 kt	842
16:30:00.17	37.170963	-116.088036	4,488	-1,377	Weapons Related	Less than 20 kt	
17:00:00.07	37.073820	-116.020703	4,139	-1,449	Weapons Related	20 to 150 kt	843
17:20:00.08	37.079756	-116.052192	4,111	-2,099	Weapons Related	20 to 150 kt	844

Operation Quicksilver

15:25:00.17	37.287894	-116.298378	6,991	-1,891	Weapons Related	Less than 20 kt	845
19:00:00.17	37.126821	-116.084743	4,271	-1,778	Joint US-UK	20 to 150 kt	846
17:07:30.07	37.029621	-116.025000	3,991	-812	Weapons Related	Less than 20 kt	847
15:30:00.16	37.273338	-116.411164	6,581	-2,260	Weapons Related	20 to 150 kt	848
18:00:00.10	37.105363	-116.012547	4,389	-1,071	Weapons Related	Less than 20 kt	849
20:00:00.09	37.102435	-116.055712	4,159	-1,900	Weapons Related	20 to 150 kt	850
18:05:00.16	37.151962	-116.072708	4,344	-1,760	Weapons Related	20 to 150 kt	851
18:30:00.10	37.027781	-116.040620	3,995	-1,197	Weapons Related	Less than 20 kt	852
16:00:00.10	36.998135	-116.018604	3,951	-1,100	Weapons Related	Less than 20 kt	853
14:00:00.17	37.289635	-116.456143	6,366	-2,239	Weapons Related	20 to 150 kt	854
15:00:13.54	37.107580	-116.015958	4,384	-1,100	Weapons Related	Less than 20 kt	855
14:44:00.17	37.143116	-116.088389	4,364	-1,760	Weapons Related	20 to 150 kt	856
15:07:30.16	37.083902	-116.070757	4,142	-1,475	Weapons Related	20 to 150 kt	857
15:00:00.11	37.014700	-116.008872	3,966	-1,301	Weapons Related	20 to 150 kt	858
15:08:00.17	37.121173	-116.067457	4,221	-1,522	Joint US-UK	20 to 150 kt	859
15:00:00.09	37.088064	-116.053654	4,130	-2,100	Weapons Related	140 kt	860
17:02:00.09	37.154948	-116.039058	4,289	-656	Weapons Related	Less than 20 kt	861
15:00:00.09	37.229014	-116.364938	6,758	-2,100	Weapons Related	20 to 150 kt	862

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Tinderbox

863	Backgammon ▼	11/29/1979	LANL	NNSS	U3jh	Shaft
864	Azul Detonation destroyed Peninsula device that was damaged during emplacement on 10/23/1975 Peninsula device was not tested	12/14/1979	LLNL	NNSS	U2em	Shaft
865	Tarko ▼ Drillback and gas sampling release of radioactivity detected onsite only	02/28/1980	LLNL	NNSS	U2fd	Shaft
866	Norbo Accidental and gas sampling release of radioactivity detected onsite only	03/08/1980	LLNL	NNSS	U8c	Shaft
867	Liptauer ▼	04/03/1980	LLNL	NNSS	U2eh	Shaft
868	Pyramid ▼	04/16/1980	LANL	NNSS	U7be	Shaft
869	Colwick Gas sampling release of radioactivity detected onsite only	04/26/1980	LLNL/UK	NNSS	U20ac	Shaft
870	Canfield ▼	05/02/1980	LANL	NNSS	U3kx	Shaft
871	Flora Drillback release of radioactivity detected onsite only	05/22/1980	LANL	NNSS	U3lg	Shaft
872	Kash Gas sampling release of radioactivity detected onsite only	06/12/1980	LLNL	NNSS	U20af	Shaft
873	Huron King ▼	06/24/1980	LANL/DoD	NNSS	U3ky	Shaft
874	Tafi Gas sampling release of radioactivity detected onsite only	07/25/1980	LLNL	NNSS	U20ae	Shaft
875	Verdello ▼ Drillback and cementback release of radioactivity detected onsite only	07/31/1980	LANL	NNSS	U3ku	Shaft
876	Bonarda ▼	09/25/1980	LANL	NNSS	U3gv	Shaft
877	Riola Accidental release of radioactivity detected offsite Gas sampling release of radioactivity detected onsite only	09/25/1980	LLNL	NNSS	U2eq	Shaft

Operation Guardian

878	Dutchess	10/24/1980	LANL/UK	NNSS	U7bm	Shaft
879	Miners Iron Controlled release of radioactivity detected onsite only	10/31/1980	LANL/DoD	NNSS	U12n.11	Tunnel
880	Dauphin ▼	11/14/1980	LLNL	NNSS	U9cq	Shaft
881	Serpa	12/17/1980	LLNL/UK	NNSS	U19ai	Shaft
882	Baseball ▼	01/15/1981	LANL	NNSS	U7ba	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Tinderbox

15:00:00.10	36.993912	-116.024975	3,948	-750	Weapons Related	Less than 20 kt	863
18:00:00.09	37.137325	-116.063944	4,273	-672	Weapons Related	Less than 20 kt	864
15:00:00.09	37.126500	-116.089376	4,287	-1,209	Weapons Related	Less than 20 kt	865
15:35:00.09	37.179898	-116.083993	4,515	-889	Weapons Related	Less than 20 kt	866
14:00:00.09	37.149828	-116.083132	4,368	-1,368	Weapons Related	20 to 150 kt	867
20:00:00.09	37.101071	-116.031400	4,241	-1,900	Weapons Related	20 to 150 kt	868
17:00:00.08	37.248374	-116.423288	6,473	-2,077	Joint US-UK	20 to 150 kt	869
18:46:30.09	37.055962	-116.019826	4,060	-1,150	Weapons Related	Less than 20 kt	870
13:00:00.09	37.003016	-116.032261	3,958	-1,100	Weapons Related	Less than 20 kt	871
17:15:00.09	37.281604	-116.454743	6,360	-2,116	Weapons Related	20 to 150 kt	872
15:10:00.07	37.023247	-116.035005	3,985	-1,050	Weapons Effects	Less than 20 kt	873
19:05:00.08	37.256269	-116.478298	6,189	-2,232	Weapons Related	20 to 150 kt	874
18:19:00.09	37.012995	-116.023615	3,970	-1,200	Weapons Related	Less than 20 kt	875
14:45:00.09	37.056117	-116.048955	4,057	-1,250	Weapons Related	20 to 150 kt	876
15:26:30.08	37.115814	-116.065438	4,203	-1,391	Weapons Related	1.07 kt	877

Operation Guardian

19:15:00.12	37.074528	-116.000132	4,238	-1,400	Joint US-UK	Less than 20 kt	878
18:00:00.09	37.211210	-116.206250	7,347	-1,278	Weapons Effects	Less than 20 kt	879
16:50:00.08	37.111444	-116.019526	4,372	-1,050	Weapons Related	Less than 20 kt	880
15:10:00.09	37.324737	-116.316055	6,742	-1,879	Joint US-UK	20 to 150 kt	881
20:25:00.09	37.087042	-116.045619	4,129	-1,850	Weapons Related	20 to 150 kt	882

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Guardian – Continued

883	Clairette	02/05/1981	LANL	NNSS	U3kr	Shaft
884	Seco	02/25/1981	LLNL	NNSS	U8l	Shaft
885	Vide Gas sampling release of radioactivity detected onsite only	04/30/1981	LLNL	NNSS	U8k	Shaft
886	Aligote	05/29/1981	LANL	NNSS	U7bg	Shaft
887	Harzer	06/06/1981	LLNL	NNSS	U19aj	Shaft
888	Niza ☹ Drillback and gas sampling release of radioactivity detected onsite only	07/10/1981	LLNL	NNSS	U9cr	Shaft
889	Pineau	07/16/1981	LANL	NNSS	U7ao	Shaft
890	Havarti ☹	08/05/1981	LLNL	NNSS	U10bg	Shaft
891	Islay ☹ Drillback release of radioactivity detected onsite only	08/27/1981	LLNL	NNSS	U2er	Shaft
892	Trebbiano ☹ Drillback release of radioactivity detected onsite only	09/04/1981	LANL	NNSS	U3lj	Shaft
893	Cernada	09/24/1981	LANL	NNSS	U3kk	Shaft

Operation Praetorian

894	Paliza ☹	10/01/1981	LANL	NNSS	U7bd	Shaft
895	Tilci ☹ Gas sampling release of radioactivity detected onsite only	11/11/1981	LLNL	NNSS	U4ak	Shaft
896	Rousanne ☹	11/12/1981	LANL/UK	NNSS	U4p	Shaft
897	Akavi ☹ Gas sampling release of radioactivity detected onsite only	12/03/1981	LLNL	NNSS	U2es	Shaft
898	Caboc ☹ Drillback and gas sampling release of radioactivity detected onsite only	12/16/1981	LLNL	NNSS	U2cp	Shaft
899	Jornada ☹	01/28/1982	LANL	NNSS	U4j	Shaft
900	Molbo Gas sampling release of radioactivity detected onsite only	02/12/1982	LLNL	NNSS	U20ag	Shaft
901	Hosta	02/12/1982	LANL	NNSS	U19ak	Shaft
902	Tenaja ☹	04/17/1982	LANL	NNSS	U3lh	Shaft
903	Gibne Drillback release of radioactivity detected onsite only	04/25/1982	LLNL/UK	NNSS	U20ah	Shaft
904	Kryddost	05/06/1982	LLNL	NNSS	U2co	Shaft

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Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Guardian – Continued

18:00:00.12	37.010848	-116.033049	3,968	-1,160	Weapons Related	Less than 20 kt	883
15:00:00.08	37.181851	-116.085121	4,538	-656	Weapons Related	Less than 20 kt	884
14:35:00.08	37.177285	-116.085633	4,506	-1,061	Weapons Related	Less than 20 kt	885
16:00:00.09	37.101805	-116.004931	4,388	-1,050	Weapons Related	Less than 20 kt	886
18:00:00.08	37.303343	-116.326480	6,891	-2,090	Weapons Related	20 to 150 kt	887
14:00:00.10	37.128556	-116.034645	4,242	-1,120	Weapons Related	Less than 20 kt	888
15:00:00.10	37.088650	-116.020237	4,220	-680	Weapons Related	Less than 20 kt	889
13:41:00.09	37.153695	-116.035946	4,298	-656	Weapons Related	Less than 20 kt	890
14:31:00.09	37.160368	-116.067395	4,342	-965	Weapons Related	Less than 20 kt	891
15:00:00.10	37.058040	-116.048943	4,062	-1,002	Weapons Related	Less than 20 kt	892
15:00:00.09	37.008471	-116.024667	3,964	-699	Weapons Related	Less than 20 kt	893

Operation Praetorian

19:00:00.10	37.081571	-116.009622	4,224	-1,549	Weapons Related	20 to 150 kt	894
20:00:09.09	37.076273	-116.069360	4,131	-1,460	Weapons Related	20 to 150 kt	895
15:00:00.10	37.108104	-116.049847	4,166	-1,697	Joint US-UK	20 to 150 kt	896
15:00:00.10	37.148387	-116.071710	4,332	-1,621	Weapons Related	20 to 150 kt	897
21:05:00.09	37.114478	-116.123752	4,510	-1,099	Weapons Related	Less than 20 kt	898
16:00:00.10	37.091295	-116.052102	4,134	-2,096	Weapons Related	139 kt	899
14:55:00.08	37.224276	-116.463540	6,234	-2,093	Weapons Related	20 to 150 kt	900
15:25:00.09	37.347921	-116.316986	6,898	-2,098	Weapons Related	20 to 150 kt	901
18:00:00.09	37.016770	-116.010735	3,952	-1,169	Weapons Related	Less than 20 kt	902
18:05:00.09	37.255785	-116.423251	6,445	-1,869	Joint US-UK	20 to 150 kt	903
20:00:00.08	37.116792	-116.127779	4,562	-1,100	Weapons Related	Less than 20 kt	904

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Praetorian – Continued

905	Bouschet ☹ Cementback release of radioactivity detected onsite only	05/07/1982	LANL	NNSS	U3la	Shaft
906	Kesti	06/16/1982	LLNL	NNSS	U9cn	Shaft
907	Nebbiolo	06/24/1982	LANL	NNSS	U19ae	Shaft
908	Monterey ☹ Drillback release of radioactivity detected onsite only	07/29/1982	LLNL	NNSS	U4aj	Shaft
909	Atrisco ☹	08/05/1982	LANL	NNSS	U7bp	Shaft
910	Queso	08/11/1982	LLNL	NNSS	U10bf	Shaft
911	Cerro	09/02/1982	LANL	NNSS	U3lf	Shaft
912	Diamond Ace Simultaneous with Huron Landing Controlled release of radioactivity detected onsite only	09/23/1982	LLNL/DoD	NNSS	U12n.15	Tunnel
913	Huron Landing Simultaneous with Diamond Ace Controlled release of radioactivity detected onsite only	09/23/1982	LANL/DoD	NNSS	U12n.15	Tunnel
914	Frisco ☹ Drillback release of radioactivity detected onsite only	09/23/1982	LLNL	NNSS	U8m	Shaft
915	Borrego	09/29/1982	LANL	NNSS	U7br	Shaft

Operation Phalanx

916	Seyval ☹	11/12/1982	LANL	NNSS	U3lm	Shaft
917	Manteca ☹ Drillback release of radioactivity detected onsite only	12/10/1982	LLNL	NNSS	U4al	Shaft
918	Coalora ☹	02/11/1983	LANL	NNSS	U3lo	Shaft
919	Cheedam ☹ Drillback and gas sampling release of radioactivity detected onsite only	02/17/1983	LLNL	NNSS	U2et	Shaft
920	Cabra	03/26/1983	LLNL	NNSS	U20aj	Shaft
921	Turquoise ☹ Cementback release of radioactivity detected onsite only	04/14/1983	LANL	NNSS	U7bu	Shaft
922	Armada ☹ Drillback release of radioactivity detected onsite only	04/22/1983	LLNL/UK	NNSS	U9cs	Shaft
923	Crowdie ☹ Drillback and gas sampling release of radioactivity detected onsite only	05/05/1983	LLNL	NNSS	U2fe	Shaft

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Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Praetorian – Continued

18:17:00.11	37.069013	-116.046331	4,083	-1,850	Weapons Related	20 to 150 kt	905
14:00:00.08	37.114180	-116.017448	4,391	-945	Weapons Related	Less than 20 kt	906
14:15:00.09	37.236163	-116.371062	6,775	-2,098	Weapons Related	20 to 150 kt	907
20:05:00.08	37.102259	-116.075843	4,200	-1,312	Weapons Related	20 to 150 kt	908
14:00:00.09	37.084158	-116.007415	4,248	-2,099	Weapons Related	138 kt	909
15:00:00.00	37.189744	-116.048555	4,387	-710	Weapons Related	Less than 20 kt	910
14:00:00.09	37.019686	-116.016537	3,975	-750	Weapons Related	Less than 20 kt	911
16:00:00.09	37.211995	-116.207512	7,412	-1,390	Weapons Effects	Less than 20 kt	912
16:00:00.09	37.211973	-116.207639	7,417	-1,339	Weapons Effects	Less than 20 kt	913
17:00:00.09	37.174702	-116.088666	4,507	-1,480	Weapons Related	20 to 150 kt	914
13:30:00.10	37.091256	-116.045756	4,137	-1,848	Weapons Related	Less than 150 kt	915

Operation Phalanx

19:17:00.10	37.023620	-116.032947	3,984	-1,201	Weapons Related	Less than 20 kt	916
15:20:00.09	37.080135	-116.072758	4,144	-1,350	Weapons Related	20 to 150 kt	917
16:00:00.10	37.056103	-116.046214	4,058	-899	Weapons Related	Less than 20 kt	918
17:00:00.09	37.162769	-116.064219	4,332	-1,125	Weapons Related	Less than 20 kt	919
20:20:00.09	37.300630	-116.460926	6,345	-1,781	Weapons Related	20 to 150 kt	920
19:05:00.12	37.072790	-116.046825	4,088	-1,749	Weapons Related	Less than 150 kt	921
13:53:00.08	37.111465	-116.023298	4,339	-869	Joint US-UK	Less than 20 kt	922
15:20:00.08	37.145593	-116.090089	4,383	-1,280	Weapons Related	Less than 20 kt	923

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Phalanx – Continued

924	Mini Jade Controlled release of radioactivity detected onsite only	05/26/1983	LANL/DoD	NNSS	U12n.12	Tunnel
925	Fahada	05/26/1983	LANL	NNSS	U7bh	Shaft
926	Danablu ☹ Drillback release of radioactivity detected onsite only	06/09/1983	LLNL	NNSS	U2eu	Shaft
927	Laban ☹ Drillback release of radioactivity detected onsite only	08/03/1983	LLNL	NNSS	U2ff	Shaft
928	Sabado	08/11/1983	LANL	NNSS	U3lc	Shaft
929	Jarlsberg ☹ Drillback release of radioactivity detected onsite only	08/27/1983	LLNL	NNSS	U10ca	Shaft
930	Chancellor	09/01/1983	LANL	NNSS	U19ad	Shaft
931	Tomme/Midnight Zephyr	09/21/1983	LLNL/DoD	NNSS	U12n.18	Tunnel
932	Branco ☹ Branco-Herkimer ☹ Simultaneous, same hole	09/21/1983 09/21/1983	LLNL LLNL	NNSS NNSS	U2ew U2ew	Shaft Shaft
933	Techado	09/22/1983	LANL	NNSS	U4o	Shaft
934	Navata	09/29/1983	LANL	NNSS	U3lb	Shaft

Operation Fusileer

935	Muggins ☹	12/09/1983	LANL	NNSS	U3ls	Shaft
936	Romano ☹ Cementback release of radioactivity detected onsite only	12/16/1983	LLNL	NNSS	U2ex	Shaft
937	Gorbea Drillback and gas sampling release of radioactivity detected onsite only	01/31/1984	LLNL	NNSS	U2cq	Shaft
938	Midas Myth/Milagro ☹	02/15/1984	LANL/DoD	NNSS	U12t.04	Tunnel
939	Tortugas ☹	03/01/1984	LANL	NNSS	U3gg	Shaft
940	Agrini ☹ Accidental, controlled, and drillback release of radioactivity detected onsite only	03/31/1984	LLNL	NNSS	U2ev	Shaft
941	Mundo ☹	05/01/1984	LANL/UK	NNSS	U7bo	Shaft
942	Orkney Drillback release of radioactivity detected onsite only	05/02/1984	LLNL	NNSS	U10be	Shaft
943	Bellow ☹	05/16/1984	LLNL	NNSS	U4ac	Shaft
944	Caprock ☹ Gas sampling release of radioactivity detected onsite only	05/31/1984	LANL	NNSS	U4q	Shaft
945	Duoro ☹	06/20/1984	LANL	NNSS	U3lv	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Phalanx – Continued

14:30:00.09	37.208676	-116.205904	7,401	-1,244	Weapons Effects	Less than 20 kt	924
15:00:00.09	37.102858	-116.006568	4,392	-1,261	Weapons Related	Less than 20 kt	925
17:10:00.09	37.157569	-116.090101	4,441	-1,050	Weapons Related	Less than 20 kt	926
13:33:00.10	37.118948	-116.089777	4,275	-1,070	Weapons Related	Less than 20 kt	927
14:00:00.12	36.997640	-116.003537	3,946	-1,050	Weapons Related	Less than 20 kt	928
14:00:00.09	37.192891	-116.034909	4,411	-655	Weapons Related	Less than 20 kt	929
14:00:00.08	37.272710	-116.355916	6,692	-2,046	Weapons Related	143 kt	930
15:00:00.09	37.209695	-116.210129	7,401	-1,328	Weapons Effects	Less than 20 kt	931
16:25:00.08	37.121309	-116.056452	4,209	-960	Weapons Related	Less than 20 kt	932
16:25:00.08	37.121309	-116.056452	4,209	-1,400	Weapons Related	Less than 20 kt	
15:00:00.12	37.105563	-116.050269	4,159	-1,747	Weapons Related	Less than 150 kt	933
15:00:00.09	37.053360	-116.021222	4,048	-600	Safety Experiment	Less than 20 kt	934

Operation Fusileer

16:00:00.11	37.012705	-116.046567	3,987	-800	Weapons Related	Less than 20 kt	935
18:30:00.09	37.140400	-116.072939	4,311	-1,690	Weapons Related	20 to 150 kt	936
15:30:00.08	37.112649	-116.122575	4,499	-1,273	Weapons Related	20 to 150 kt	937
17:00:00.11	37.221336	-116.181950	6,811	-1,184	Weapons Effects	Less than 20 kt	938
17:45:00.09	37.065718	-116.047164	4,079	-2,095	Weapons Related	20 to 150 kt	939
14:30:00.08	37.146392	-116.084933	4,366	-1,050	Weapons Related	Less than 20 kt	940
19:05:00.09	37.106175	-116.023250	4,328	-1,857	Joint US-UK	20 to 150 kt	941
13:50:00.09	37.198428	-116.054836	4,522	-688	Weapons Related	Less than 20 kt	942
16:00:00.08	37.092463	-116.094092	4,241	-680	Weapons Related	Less than 20 kt	943
13:04:00.10	37.103086	-116.048917	4,146	-1,968	Weapons Related	20 to 150 kt	944
15:15:00.09	37.000331	-116.043928	3,961	-1,250	Weapons Related	20 to 150 kt	945

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Fusileer – Continued

946	Normanna ☹	07/12/1984	LLNL	NNSS	U10cb	Shaft
947	Kappeli Accidental release of radioactivity detected onsite only	07/25/1984	LLNL	NNSS	U20am	Shaft
948	Correo ☹	08/02/1984	LANL	NNSS	U3lw	Shaft
949	Wexford ☹	08/30/1984	LLNL	NNSS	U2cr	Shaft
950	Dolcetto ☹	08/30/1984	LANL	NNSS	U7bi	Shaft
951	Breton ☹ Drillback and gas sampling release of radioactivity detected onsite only	09/13/1984	LLNL	NNSS	U4ar	Shaft

Operation Grenadier

952	Vermejo ☹	10/02/1984	LANL	NNSS	U4r	Shaft
953	Villita ☹	11/10/1984	LANL	NNSS	U3ld	Shaft
954	Egmont	12/09/1984	LLNL/UK	NNSS	U20al	Shaft
955	Tierra Accidental release of radioactivity detected onsite only	12/15/1984	LLNL	NNSS	U19ac	Shaft
956	Minero ☹	12/20/1984	LANL	NNSS	U3lt	Shaft
957	Vaughn Drillback release of radioactivity detected onsite only	03/15/1985	LANL	NNSS	U3lr	Shaft
958	Cottage ☹	03/23/1985	LLNL	NNSS	U8j	Shaft
959	Hermosa	04/02/1985	LANL	NNSS	U7bs	Shaft
960	Misty Rain Controlled release of radioactivity detected offsite	04/06/1985	LLNL/DoD	NNSS	U12n.17	Tunnel
961	Towanda	05/02/1985	LANL	NNSS	U19ab	Shaft
962	Salut Drillback and gas sampling release of radioactivity detected onsite only	06/12/1985	LLNL	NNSS	U20ak	Shaft
963	Ville ☹ Drillback and gas sampling release of radioactivity detected onsite only	06/12/1985	LLNL	NNSS	U4am	Shaft
964	Maribo Drillback release of radioactivity detected onsite only	06/26/1985	LLNL	NNSS	U2cs	Shaft
965	Serena Drillback release of radioactivity detected onsite only	07/25/1985	LLNL	NNSS	U20an	Shaft
966	Cebreiro Gas sampling release of radioactivity detected onsite only	08/14/1985	LLNL	NNSS	U9cw	Shaft
967	Chamita ☹	08/17/1985	LANL	NNSS	U3lz	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Fusileer – Continued

14:00:00.09	37.191937	-116.035247	4,404	-656	Weapons Related	Less than 20 kt	946
15:30:00.08	37.267711	-116.411530	6,593	-2,100	Weapons Related	20 to 150 kt	947
15:00:00.09	37.016758	-116.008512	3,967	-1,096	Weapons Related	Less than 20 kt	948
14:45:00.00	37.143840	-116.126129	4,604	-1,030	Weapons Related	Less than 20 kt	949
14:45:00.10	37.089748	-116.000235	4,324	-1,198	Weapons Related	Less than 20 kt	950
14:00:00.00	37.086639	-116.072046	4,149	-1,585	Weapons Related	20 to 150 kt	951

Operation Grenadier

18:14:00.10	37.085180	-116.053674	4,119	-1,149	Weapons Related	Less than 20 kt	952
16:40:00.09	37.000056	-116.018245	3,952	-1,221	Weapons Related	Less than 20 kt	953
19:40:00.09	37.270022	-116.498473	6,124	-1,792	Joint US-UK	20 to 150 kt	954
14:45:00.00	37.281310	-116.306296	7,038	-2,100	Weapons Related	20 to 150 kt	955
16:20:00.11	37.011898	-116.045573	3,985	-803	Weapons Related	Less than 20 kt	956
16:31:00.10	37.058025	-116.046198	4,062	-1,396	Weapons Related	20 to 150 kt	957
18:30:00.08	37.179926	-116.089828	4,556	-1,690	Weapons Related	20 to 150 kt	958
20:00:00.09	37.094763	-116.033212	4,192	-2,094	Weapons Related	20 to 150 kt	959
23:15:00.09	37.200782	-116.208047	7,345	-1,275	Weapons Effects	Less than 20 kt	960
15:20:00.08	37.253352	-116.326091	6,928	-2,166	Weapons Related	20 to 150 kt	961
15:15:00.08	37.247799	-116.489947	6,235	-1,995	Weapons Related	20 to 150 kt	962
17:30:00.09	37.088265	-116.084808	4,189	-955	Weapons Related	Less than 20 kt	963
18:03:00.08	37.124049	-116.122860	4,526	-1,250	Weapons Related	Less than 20 kt	964
14:00:00.09	37.297192	-116.438962	6,462	-1,960	Weapons Related	20 to 150 kt	965
13:00:00.08	37.111034	-116.015246	4,405	-599	Weapons Related	Less than 20 kt	966
16:25:00.09	37.002253	-116.043912	3,964	-1,088	Weapons Related	Less than 20 kt	967

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type	
Operation Grenadier – Continued						
968	Ponil ☹	09/27/1985	LANL	NNSS	U7bv	Shaft
Operation Charioteer						
969	Mill Yard Controlled release of radioactivity detected onsite only	10/09/1985	LANL/DoD	NNSS	U12n.20	Tunnel
970	Diamond Beech Controlled release of radioactivity detected onsite only	10/09/1985	LLNL/DoD	NNSS	U12n.19	Tunnel
971	Roquefort ☹ Gas sampling release of radioactivity detected onsite only	10/16/1985	LLNL	NNSS	U4as	Shaft
972	Abo Drillback release of radioactivity detected onsite only	10/30/1985	LANL	NNSS	U3mc	Shaft
973	Kinibito ☹	12/05/1985	LANL/UK	NNSS	U3me	Shaft
974	Goldstone	12/28/1985	LLNL	NNSS	U20ao	Shaft
975	Glencoe ☹ Drillback release of radioactivity detected offsite	03/22/1986	LANL	NNSS	U4i	Shaft
976	Mighty Oak Controlled release of radioactivity detected offsite	04/10/1986	LLNL/DoD	NNSS	U12t.08	Tunnel
977	Mogollon ☹	04/20/1986	LANL	NNSS	U3li	Shaft
978	Jefferson Drillback release of radioactivity detected onsite only	04/22/1986	LLNL	NNSS	U20ai	Shaft
979	Panamint Drillback and gas sampling release of radioactivity detected onsite only	05/21/1986	LLNL	NNSS	U2gb	Shaft
980	Tajo ☹	06/05/1986	LANL	NNSS	U7bl	Shaft
981	Darwin	06/25/1986	LLNL/UK	NNSS	U20aq	Shaft
982	Cybar Cementback release of radioactivity detected onsite only	07/17/1986	LANL	NNSS	U19ar	Shaft
983	Cornucopia ☹ Gas sampling release of radioactivity detected onsite only	07/24/1986	LLNL	NNSS	U2gaS	Shaft
984	Galveston	09/04/1986	LANL	NNSS	U19af	Shaft
985	Aleman	09/11/1986	LANL	NNSS	U3kz	Shaft
986	Labquark Accidental release of radioactivity detected onsite only	09/30/1986	LLNL	NNSS	U19an	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Grenadier – Continued

14:15:00.08	37.089762	-116.002635	4,300	-1,197	Weapons Related	Less than 20 kt	968
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Operation Charioteer

21:40:00.13	37.209113	-116.205988	7,317	-1,217	Weapons Effects	Less than 20 kt	969
23:20:00.09	37.209621	-116.210960	7,403	-1,326	Weapons Effects	Less than 20 kt	970
21:35:00.09	37.109900	-116.122255	4,488	-1,363	Weapons Related	20 to 150 kt	971
16:00:00.09	37.050560	-116.037006	4,032	-644	Weapons Related	Less than 20 kt	972
15:00:00.07	37.053219	-116.046237	4,052	-1,901	Joint US-UK	20 to 150 kt	973
19:01:00.09	37.237751	-116.473638	6,279	-1,800	Weapons Related	20 to 150 kt	974
16:15:00.08	37.082957	-116.066908	4,136	-2,000	Weapons Related	29 kt	975
14:08:30.10	37.218276	-116.183982	6,924	-1,294	Weapons Effects	Less than 20 kt	976
15:12:30.07	37.011608	-116.046918	3,985	-851	Weapons Related	Less than 20 kt	977
14:30:00.09	37.264063	-116.441091	6,503	-1,992	Weapons Related	20 to 150 kt	978
13:59:00.08	37.124987	-116.061260	4,219	-1,575	Weapons Related	Less than 20 kt	979
15:04:00.06	37.098243	-116.016380	4,317	-1,700	Weapons Related	20 to 150 kt	980
20:27:45.09	37.264530	-116.500200	6,155	-1,801	Joint US-UK	20 to 150 kt	981
21:00:00.06	37.278620	-116.356493	6,707	-2,057	Weapons Related	119 kt	982
15:05:00.09	37.142700	-116.071988	4,312	-1,248	Weapons Related	Less than 20 kt	983
16:09:00.06	37.239678	-116.368643	6,710	-1,598	Weapons Related	Less than 20 kt	984
14:57:00.11	37.069032	-116.050561	4,085	-1,649	Weapons Related	Less than 20 kt	985
22:30:00.10	37.300029	-116.308310	6,978	-2,020	Weapons Related	20 to 150 kt	986

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Musketeer

987	Belmont Drillback and gas sampling release of radioactivity detected onsite only	10/16/1986	LLNL	NNSS	U20as	Shaft
988	Gascon ◡ Gas sampling release of radioactivity detected onsite only	11/14/1986	LANL	NNSS	U4t	Shaft
989	Bodie Drillback and accidental release of radioactivity detected onsite only	12/13/1986	LLNL	NNSS	U20ap	Shaft
990	Hazebrook-Apricot (Orange) Hazebrook-Checkerberry (Red) Hazebrook-Emerald (Green) Simultaneous, same hole Hazebrook-Apricot (Orange), -Checkerberry (Red), -Emerald (Green): Gas sampling release of radioactivity detected onsite only	02/03/1987 02/03/1987 02/03/1987	LLNL LLNL LLNL	NNSS NNSS NNSS	U10bh U10bh U10bh	Shaft Shaft Shaft
991	Tornero ◡	02/11/1987	LANL	NNSS	U3ll	Shaft
992	Middle Note	03/18/1987	LLNL/DoD	NNSS	U12n.21	Tunnel
993	Delamar	04/18/1987	LLNL	NNSS	U20at	Shaft
994	Presidio	04/22/1987	LANL	NNSS	U6d	Shaft
995	Hardin Gas sampling release of radioactivity detected onsite only	04/30/1987	LLNL	NNSS	U20av	Shaft
996	Brie ◡	06/18/1987	LLNL	NNSS	U10cc	Shaft
997	Mission Ghost Controlled release of radioactivity detected onsite only	06/20/1987	LANL/DoD	NNSS	U12t.09	Tunnel
998	Panchuela ◡ Drillback release of radioactivity detected onsite only	06/30/1987	LANL	NNSS	U3mg	Shaft
999	Midland	07/16/1987	LANL/UK	NNSS	U7by	Shaft
1000	Tahoka ◡	08/13/1987	LANL	NNSS	U3mf	Shaft
1001	Lockney Drillback release of radioactivity detected onsite only	09/24/1987	LANL	NNSS	U19aq	Shaft

Operation Touchstone

1002	Borate ◡ Drillback release of radioactivity detected onsite only	10/23/1987	LLNL	NNSS	U2ge	Shaft
1003	Waco	12/01/1987	LANL	NNSS	U3lu	Shaft
1004	Mission Cyber	12/02/1987	LLNL/DoD	NNSS	U12p.02	Tunnel
1005	Kernville	02/15/1988	LLNL	NNSS	U20ar	Shaft
1006	Abilene ◡	04/07/1988	LANL	NNSS	U3mn	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Musketeer

19:25:00.09	37.220157	-116.462524	6,227	-1,985	Weapons Related	20 to 150 kt	987
16:00:00.07	37.100381	-116.048939	4,144	-1,946	Weapons Related	20 to 150 kt	988
17:50:05.09	37.262907	-116.412571	6,621	-2,083	Weapons Related	20 to 150 kt	989
15:20:00.08 15:20:00.08 15:20:00.08	37.181096 37.181096 37.181096	-116.049312 -116.049312 -116.049312	4,322 4,322 4,322	-860 -740 -610	Safety Experiment Weapons Related Weapons Related	Less than 20 kt Less than 20 kt Less than 20 kt	990
16:45:00.07	37.010640	-116.045556	3,981	-979	Weapons Related	Less than 20 kt	991
18:28:00.09	37.210189	-116.209439	7,383	-1,308	Weapons Effects	Less than 20 kt	992
13:40:00.00	37.247830	-116.510033	6,240	-1,785	Weapons Related	20 to 150 kt	993
15:00:00.09	36.983093	-116.005447	3,932	-1,049	Weapons Related	Less than 20 kt	994
13:30:00.09	37.232994	-116.424011	6,464	-2,051	Weapons Related	20 to 150 kt	995
15:20:00.08	37.193506	-116.035883	4,413	-666	Weapons Related	Less than 20 kt	996
16:00:00.18	37.219905	-116.178662	6,706	-1,054	Weapons Effects	Less than 20 kt	997
16:05:00.10	36.998545	-116.043942	3,957	-1,047	Weapons Related	Less than 20 kt	998
19:00:00.08	37.103504	-116.024223	4,300	-1,597	Joint US-UK	20 to 150 kt	999
14:00:00.09	37.060912	-116.046175	4,067	-2,095	Weapons Related	20 to 150 kt	1000
15:00:00.06	37.227939	-116.375590	6,799	-2,015	Weapons Related	20 to 150 kt	1001

Operation Touchstone

16:00:00.09	37.141850	-116.079570	4,335	-1,780	Weapons Related	20 to 150 kt	1002
16:30:00.09	36.996362	-116.005332	3,946	-600	Weapons Related	Less than 20 kt	1003
16:30:00.08	37.234603	-116.164246	6,407	-888	Weapons Effects	Less than 20 kt	1004
18:10:00.09	37.314382	-116.472374	6,319	-1,777	Weapons Related	20 to 150 kt	1005
17:15:00.08	37.013110	-116.045193	3,985	-804	Weapons Related	Less than 20 kt	1006

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Touchstone – Continued

1007	Schellbourne ▼ Drillback and gas sampling release of radioactivity detected onsite only	05/13/1988	LLNL	NNSS	U2gf	Shaft
1008	Laredo ▼	05/21/1988	LANL	NNSS	U3mh	Shaft
1009	Comstock Gas sampling release of radioactivity detected onsite only	06/02/1988	LLNL	NNSS	U20ay	Shaft
1010	Nightingale Same hole with Rhyolite	06/22/1988	LLNL	NNSS	U2ey	Shaft
1011	Rhyolite Same hole with Nightingale	06/22/1988	LLNL	NNSS	U2ey	Shaft
1012	Alamo	07/07/1988	LANL	NNSS	U19au	Shaft
1013	Kearsarge The only Joint Verification Experiment conducted on the NNSS	08/17/1988	LLNL	NNSS	U19ax	Shaft
1014	Harlingen-A ▼ Harlingen-B Simultaneous, separate holes	08/23/1988 08/23/1988	LANL LANL	NNSS NNSS	U6g U6h	Shaft Shaft
1015	Bullfrog ▼ Drillback and gas sampling release of radioactivity detected onsite only	08/30/1988	LLNL	NNSS	U4au	Shaft

Operation Cornerstone

1016	Dalhart ▼	10/13/1988	LANL	NNSS	U4u	Shaft
1017	Monahans-A ▼ Monahans-B Simultaneous, separate holes	11/09/1988 11/09/1988	LANL LANL	NNSS NNSS	U3lk U6i	Shaft Shaft
1018	Kawich A-Blue Kawich A-White Simultaneous, same hole	12/09/1988 12/09/1988	LLNL LLNL	NNSS NNSS	U8n U8n	Shaft Shaft
1019	Misty Echo Gas sampling release of radioactivity detected onsite only	12/10/1988	LANL/DoD	NNSS	U12n.23	Tunnel
1020	Texarkana ▼	02/10/1989	LANL	NNSS	U7ca	Shaft
1021	Kawich-Black ▼ Kawich-Red ▼ Simultaneous, same hole Kawich-Black, -Red: Drillback release of radioactivity detected onsite only	02/24/1989 02/24/1989	LLNL LLNL	NNSS NNSS	U2cu U2cu	Shaft Shaft
1022	Ingot	03/09/1989	LLNL	NNSS	U2gg	Shaft

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Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Touchstone – Continued

15:35:00.11	37.124387	-116.072996	4,249	-1,519	Weapons Related	Less than 150 kt	1007
22:30:00.14	37.032437	-115.988170	4,092	-1,153	Weapons Related	Less than 150 kt	1008
13:00:00.09	37.260082	-116.441965	6,521	-2,035	Weapons Related	Less than 150 kt	1009
14:00:00.08	37.166110	-116.073116	4,384	-780	Safety Experiment	Less than 150 kt	1010
14:00:00.08	37.166110	-116.073116	4,384	-680	Weapons Related	Less than 150 kt	1011
15:05:30.07	37.252392	-116.377565	6,534	-2,041	Weapons Related	Less than 150 kt	1012
17:00:00.09	37.297104	-116.307420	6,986	-2,020	Weapons Related	100 to 150 kt	1013
18:30:00.08 18:30:00.08	36.991132 36.988660	-116.018872 -116.018890	3,945 3,943	-950 -950	Weapons Related Weapons Related	Less than 20 kt Less than 20 kt	1014
18:00:00.09	37.085884	-116.069388	4,145	-1,605	Weapons Related	Less than 150 kt	1015

Operation Cornerstone

14:00:00.08	37.088950	-116.050132	4,120	-2,099	Weapons Related	Less than 150 kt	1016
20:15:00.08 20:15:00.08	36.991144 36.988677	-116.021947 -116.021971	3,945 3,942	-951 -951	Weapons Related Weapons Related	Less than 20 kt Less than 20 kt	1017
15:15:00.08 15:15:00.08	37.175270 37.175270	-116.092609 -116.092609	4,542 4,542	-1,260 -1,210	Safety Experiment Safety Experiment	Less than 20 kt Less than 20 kt	1018
20:30:00.06	37.198995	-116.210314	7,413	-1,312	Weapons Effects	Less than 150 kt	1019
20:06:00.06	37.076736	-116.001481	4,244	-1,654	Weapons Related	20 to 150 kt	1020
16:15:00.08 16:15:00.08	37.128444 37.128444	-116.122829 -116.122829	4,526 4,526	-1,415 -1,215	Safety Experiment Weapons Related	Less than 20 kt Less than 20 kt	1021
14:05:00.09	37.142791	-116.067808	4,289	-1,640	Weapons Related	20 to 150 kt	1022

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Cornerstone – Continued

1023	Palisade-1 ▼	05/15/1989	LLNL	NNSS	U4at	Shaft
	Palisade-2 ▼	05/15/1989	LLNL	NNSS	U4at	Shaft
	Palisade-3 ▼	05/15/1989	LLNL	NNSS	U4at	Shaft
	Simultaneous, same hole Palisade-1, -2, -3: Gas sampling release of radioactivity detected onsite only					
1024	Tulia	05/26/1989	LANL	NNSS	U4s	Shaft
1025	Contact	06/22/1989	LLNL	NNSS	U20aw	Shaft
1026	Amarillo	06/27/1989	LANL	NNSS	U19ay	Shaft
1027	Disko Elm Controlled and gas sampling release of radioactivity detected onsite only	09/14/1989	LLNL/DoD	NNSS	U12p.03	Tunnel

Operation Aqueduct

1028	Hornitos	10/31/1989	LLNL	NNSS	U20bc	Shaft
1029	Muleshoe	11/15/1989	LANL	NNSS	U7bk	Shaft
1030	Barnwell Drillback and accidental release of radioactivity detected onsite only	12/08/1989	LLNL/UK	NNSS	U20az	Shaft
1031	Whiteface-A	12/20/1989	LANL	NNSS	U3lp	Shaft
	Whiteface-B Simultaneous, same hole	12/20/1989	LANL	NNSS	U3lp	Shaft
1032	Metropolis Drillback release of radioactivity detected onsite only	03/10/1990	LLNL	NNSS	U2gh	Shaft
1033	Bowie	04/06/1990	LANL	NNSS	U3mk	Shaft
1034	Bullion	06/13/1990	LLNL	NNSS	U20bd	Shaft
1035	Austin	06/21/1990	LANL	NNSS	U6e	Shaft
1036	Randsburg	07/25/1990	LLNL/DoD	NNSS	U12n.22a	Tunnel
	Mineral Quarry Simultaneous, separate drifts Mineral Quarry: Controlled and gas sampling release of radioactivity detected onsite only	07/25/1990	LLNL/DoD	NNSS	U12n.22	Tunnel
1037	Sundown-A	09/20/1990	LANL	NNSS	U1d	Shaft
	Sundown-B Simultaneous, same hole	09/20/1990	LANL	NNSS	U1d	Shaft
1038	Ledoux	09/27/1990	LANL	NNSS	U1a.01	Shaft

Operation Sculpin

1039	Tenabo Drillback release of radioactivity detected onsite only	10/12/1990	LLNL	NNSS	U20bb	Shaft
1040	Houston Drillback release of radioactivity detected onsite only	11/14/1990	LANL/UK	NNSS	U19az	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Cornerstone – Continued

13:10:00.09	37.107563	-116.121757	4,479	-1,100	Weapons Related	Less than 20 kt	1023
13:10:00.09	37.107563	-116.121757	4,479	-1,280	Safety Experiment	Less than 20 kt	
13:10:00.09	37.107563	-116.121757	4,479	-1,324	Safety Experiment	Less than 20 kt	
18:07:00.02	37.085818	-116.056000	4,125	-1,305	Weapons Related	Less than 20 kt	1024
21:15:00.08	37.282822	-116.413194	6,585	-1,785	Weapons Related	20 to 150 kt	1025
15:30:00.02	37.275406	-116.354444	6,712	-2,100	Weapons Related	20 to 150 kt	1026
15:00:00.10	37.235839	-116.163771	6,377	-857	Weapons Effects	Less than 20 kt	1027

Operation Aqueduct

15:30:00.09	37.263049	-116.491615	6,146	-1,850	Weapons Related	20 to 150 kt	1028
20:20:00.12	37.106469	-116.014246	4,391	-802	Weapons Related	Less than 20 kt	1029
15:00:00.09	37.231040	-116.410277	6,573	-1,971	Joint US-UK	20 to 150 kt	1030
22:00:00.06	37.025813	-116.032072	3,985	-646	Safety Experiment	Less than 20 kt	1031
22:00:00.06	37.025813	-116.032072	3,985	-599	Safety Experiment	Less than 20 kt	
16:00:00.08	37.112457	-116.056047	4,177	-1,540	Weapons Related	20 to 150 kt	1032
17:00:00.04	37.067623	-115.992991	4,257	-700	Weapons Related	Less than 20 kt	1033
16:00:00.09	37.261551	-116.421002	6,486	-2,211	Weapons Related	20 to 150 kt	1034
18:15:00.00	36.992788	-116.005363	3,942	-1,150	Weapons Related	Less than 20 kt	1035
15:00:00.00	37.206910	-116.215115	7,359	-1,278	Weapons Effects	Less than 20 kt	1036
15:00:00.06	37.206822	-116.215129	7,359	-1,278	Weapons Related	Less than 20 kt	
16:15:00.00	37.038170	-116.057667	4,047	-887	Safety Experiment	Less than 20 kt	1037
16:15:00.00	37.038170	-116.057667	4,047	-840	Safety Experiment	Less than 20 kt	
18:02:46.00	37.007098	-116.059089	3,995	-955	Weapons Related	Less than 20 kt	1038

Operation Sculpin

17:30:00.08	37.247807	-116.495104	6,226	-1,969	Weapons Related	20 to 150 kt	1039
19:17:00.07	37.227365	-116.372127	6,753	-1,950	Joint US-UK	20 to 150 kt	1040

U.S. Nuclear Tests - By Date

Test	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
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Operation Sculpin – Continued

1041	Coso-Bronze ▼ Coso-Gray ▼ Coso-Silver ▼ Simultaneous, same hole	03/08/1991 03/08/1991 03/08/1991	LLNL LLNL LLNL	NNSS NNSS NNSS	U4an U4an U4an	Shaft Shaft Shaft
1042	Bexar Cementback release of radioactivity detected onsite only	04/04/1991	LANL	NNSS	U19ba	Shaft
1043	Montello	04/16/1991	LLNL	NNSS	U20bf	Shaft
1044	Floydada	08/15/1991	LANL	NNSS	U7cb	Shaft
1045	Hoya Threshold Test Ban Treaty test; yield measurements taken by the Soviet Union as part of the treaty	09/14/1991	LLNL	NNSS	U20be	Shaft
1046	Distant Zenith Controlled and gas sampling release of radioactivity detected onsite only	09/19/1991	LANL/DoD	NNSS	U12p.04	Tunnel

Operation Julin

1047	Lubbock ▼ Drillback release of radioactivity detected onsite only	10/18/1991	LANL	NNSS	U3mt	Shaft
1048	Bristol	11/26/1991	LLNL/UK	NNSS	U4av	Shaft
1049	Junction Threshold Test Ban Treaty test; yield measurements taken by the Soviet Union as part of the treaty	03/26/1992	LANL	NNSS	U19bg	Shaft
1050	Diamond Fortune Controlled release of radioactivity detected onsite only	04/30/1992	LANL/DoD	NNSS	U12p.05	Tunnel
1051	Victoria	06/19/1992	LANL	NNSS	U3kv	Shaft
1052	Galena-Green Galena-Orange Galena-Yellow Simultaneous, same hole	06/23/1992 06/23/1992 06/23/1992	LLNL LLNL LLNL	NNSS NNSS NNSS	U9cv U9cv U9cv	Shaft Shaft Shaft
1053	Hunters Trophy Test to ensure reliability of U.S. deterrent forces Gas sampling release of radioactivity detected onsite only	09/18/1992	LLNL/DoD	NNSS	U12n.24	Tunnel
1054	Divider Test to ensure the safety of U.S. deterrent forces Drillback release of radioactivity detected onsite only	09/23/1992	LANL	NNSS	U3ml	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
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Operation Sculpin – Continued

21:02:45.08	37.104317	-116.074901	4,204	-1,093	Weapons Related	Less than 20 kt	1041
21:02:45.08	37.104317	-116.074901	4,204	-1,450	Weapons Related	Less than 20 kt	
21:02:45.08	37.104317	-116.074901	4,204	-1,559	Safety Experiment	Less than 20 kt	
19:00:00.00	37.296027	-116.313786	7,037	-2,065	Weapons Related	20 to 150 kt	1042
15:30:00.07	37.245385	-116.442525	6,522	-2,105	Weapons Related	20 to 150 kt	1043
16:00:00.00	37.087287	-116.002657	-1,650	-1,650	Weapons Related	Less than 20 kt	1044
19:00:00.08	37.225586	-116.429019	6,493	-2,159	Weapons Related	20 to 150 kt	1045
16:30:00.07	37.235678	-116.167307	6,392	-865	Weapons Effects	Less than 20 kt	1046

Operation Julin

19:12:00.00	37.063384	-116.046158	4,067	-1,500	Weapons Related	20 to 150 kt	1047
18:35:00.07	37.096440	-116.070481	4,177	-1,500	Joint US-UK	Less than 20 kt	1048
16:30:00.00	37.272398	-116.360660	6,694	-2,041	Weapons Related	20 to 150 kt	1049
16:30:00.00	37.234140	-116.158224	6,307	-774	Weapons Effects	Less than 20 kt	1050
16:45:00.00	37.005372	-116.011008	3,956	-801	Weapons Related	Less than 20 kt	1051
15:00:00.07	37.123873	-116.032112	4,251	-1,312	Safety Experiment	Less than 20 kt	1052
15:00:00.07	37.123873	-116.032112	4,251	-1,247	Safety Experiment	Less than 20 kt	
15:00:00.07	37.123873	-116.032112	4,251	-951	Weapons Related	Less than 20 kt	
17:00:00.08	37.206877	-116.210853	7,346	-1,264	Weapons Effects	Less than 20 kt	1053
15:04:00.00	37.020632	-115.988778	4,051	-1,115	Weapons Related	Less than 20 kt	1054

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U.S. Nuclear Detonations – By Name

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
240	Aardvark ☹	05/12/1962	LANL	NNSS	U3amS	Shaft
659	Abeytas ☹	11/05/1970	LANL	NNSS	U3gx	Shaft
1006	Abilene ☹	04/07/1988	LANL	NNSS	U3mn	Shaft
2	Able (Operation Crossroads)	07/01/1946	LANL/DoD	Bikini Atoll	----	Airdrop
7	Able (Operation Ranger)	01/27/1951	LANL	NNSS	Area 5	Airdrop
16	Able (Operation Buster)	10/22/1951	LANL	NNSS	Area 7	Tower
23	Able (Operation Tumbler-Snapper)	04/01/1952	LANL/DoD	NNSS	Area 5	Airdrop
972	Abo	10/30/1985	LANL	NNSS	U3mc	Shaft
502	Absinthe	05/26/1967	LANL	NNSS	U3ep	Shaft
368	Ace ☹	06/11/1964	LLNL	NNSS	U2n	Shaft
306	Acushi ☹	02/08/1963	LANL	NNSS	U3bg	Shaft
227	Adobe	04/25/1962	LANL	Christmas Island area	----	Airdrop
548	Adze	05/28/1968	LANL	NNSS	U3fw	Shaft
490	Agile ☹	02/23/1967	LLNL	NNSS	U2v	Shaft
206	Agouti ☹	01/18/1962	LANL	NNSS	U3ao	Shaft
940	Agrini ☹	03/31/1984	LLNL	NNSS	U2ev	Shaft
335	Ahtanum ☹	09/13/1963	LLNL	NNSS	U2l	Shaft
477	Ajax ☹	11/11/1966	LLNL	NNSS	U9al	Shaft
629	Ajo ☹	01/30/1970	LANL	NNSS	U3gd	Shaft
897	Akavi ☹	12/03/1981	LLNL	NNSS	U2es	Shaft
711	Akbar ☹	11/09/1972	LLNL	NNSS	U10ax	Shaft
1012	Alamo	07/07/1988	LANL	NNSS	U19au	Shaft
985	Aleman	09/11/1986	LANL	NNSS	U3kz	Shaft
679	Algodones ☹	08/18/1971	LANL	NNSS	U3jn	Shaft
886	Aligote	05/29/1981	LANL	NNSS	U7bg	Shaft
598	Aliment	05/15/1969	LANL	NNSS	U3gj	Shaft
279	Allegheny ☹	09/29/1962	LLNL	NNSS	U9x	Shaft
249	Alma	06/08/1962	LANL	Christmas Island area	----	Airdrop
730	Almendro	06/06/1973	LANL	NNSS	U19v	Shaft
400	Alpaca	02/12/1965	LLNL	NNSS	U2a	Shaft
718	Alumroot	02/14/1973	LLNL	NNSS	U9cj	Shaft
377	Alva ☹	08/19/1964	LLNL	NNSS	U2j	Shaft
776	Alviso	06/11/1975	LLNL	NNSS	U2du	Shaft
1026	Amarillo	06/27/1989	LANL	NNSS	U19ay	Shaft
297	Anacostia ☹	11/27/1962	LLNL	NNSS	U9i	Shaft
344	Anchovy ☹	11/14/1963	LANL	NNSS	U3bq	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
19:00:00.10	37.065145	-116.031247	4,071	-1,424	Weapons Related	40 kt	240
15:00:00.04	37.029416	-116.012685	3,987	-1,291	Weapons Related	20 to 200 kt	659
17:15:00.08	37.013110	-116.045193	3,985	-804	Weapons Related	Less than 20 kt	1006
22:00:00.00	11.590000	165.516700	0	523	Weapons Effects	21 kt	2
13:45:00.00	36.805100	-115.950200	3,140	1,060	Weapons Related	1 kt	7
14:00:00.00	37.083250	-116.024700	4,169	100	Weapons Related	Less than 0.1 kt	16
17:00:00.00	36.797966	-115.936418	3,077	793	Weapons Effects	1 kt	23
16:00:00.09	37.050560	-116.037006	4,032	-644	Weapons Related	Less than 20 kt	972
12:30:00.03	37.044975	-116.019919	4,022	-389	Safety Experiment	Less than 20 kt	502
16:45:00.15	37.148555	-116.076866	4,353	-874	Plowshare	3 kt	368
18:30:00.14	37.046085	-116.021966	4,022	-856	Weapons Related	Low	306
15:46:00.00	1.565000	-157.365000	0	2,900	Weapons Related	190 kt	227
14:45:00.04	37.008586	-115.996256	3,987	-788	Weapons Related	Less than 20 kt	548
18:50:00.13	37.126802	-116.067248	4,256	-2,406	Weapons Related	20 to 200 kt	490
18:00:00.13	37.047200	-116.035232	4,027	-856	Weapons Related	6.4 kt	206
14:30:00.08	37.146392	-116.084933	4,366	-1,050	Weapons Related	Less than 20 kt	940
13:53:00.15	37.163323	-116.081512	4,419	-742	Weapons Related	Low	335
12:00:00.14	37.134409	-116.050724	4,202	-782	Weapons Related	Less than 20 kt	477
17:00:00.04	37.030776	-116.035631	3,998	-998	Weapons Related	Less than 20 kt	629
15:00:00.10	37.148387	-116.071710	4,332	-1,621	Weapons Related	20 to 150 kt	897
15:15:00.16	37.161994	-116.034024	4,337	-875	Weapons Related	Less than 20 kt	711
15:05:30.07	37.252392	-116.377565	6,534	-2,041	Weapons Related	Less than 150 kt	1012
14:57:00.11	37.069032	-116.050561	4,085	-1,649	Weapons Related	Less than 20 kt	985
14:00:00.03	37.057143	-116.037199	4,046	-1,731	Weapons Related	20 to 200 kt	679
16:00:00.09	37.101805	-116.004931	4,388	-1,050	Weapons Related	Less than 20 kt	886
18:00:00.04	37.011826	-115.985945	4,049	-789	Weapons Related	Less than 20 kt	598
17:00:00.15	37.116630	-116.033647	4,258	-692	Weapons Related	Low	279
17:02:00.00	1.380000	-157.195000	0	8,865	Weapons Related	782 kt	249
13:00:00.08	37.245010	-116.346905	6,876	-3,499	Weapons Related	200 to 1,000 kt	730
15:10:29.49	37.164484	-116.077415	4,402	-738	Weapons Related	330 tons	400
15:30:00.16	37.147045	-116.050962	4,237	-600	Weapons Related	Less than 20 kt	718
16:00:00.14	37.158968	-116.083968	4,420	-545	Weapons Related	4.4 kt	377
13:00:00.17	37.111732	-116.074569	4,225	-600	Safety Experiment	Less than 20 kt	776
15:30:00.02	37.275406	-116.354444	6,712	-2,100	Weapons Related	20 to 150 kt	1026
18:00:00.14	37.122762	-116.029888	4,268	-747	Plowshare	5.2 kt	297
16:00:00.12	37.039478	-116.019280	4,007	-854	Weapons Related	Low	344

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
280	Androscoggin	10/02/1962	LLNL	Johnston Island area	----	Airdrop
722	Angus ☹	04/25/1973	LANL	NNSS	U3jg	Shaft
33	Annie	03/17/1953	LANL	NNSS	Area 3	Tower
195	Antler	09/15/1961	LLNL	NNSS	U12e.03a	Tunnel
82	Apache	07/08/1956	LLNL	Enewetak Atoll	----	Barge
675	Apodaca	07/21/1971	LANL	NNSS	U3gs	Shaft
57	Apple-1	03/29/1955	LANL	NNSS	Area 4	Tower
62	Apple-2	05/05/1955	LANL	NNSS	Area 1	Tower
328	Apshapa	06/06/1963	LLNL	NNSS	U9ai	Shaft
637	Arabis-Blue	03/06/1970	LLNL	NNSS	U9ITS Z-26	Shaft
637	Arabis-Green	03/06/1970	LLNL	NNSS	U9ITS X-28	Shaft
637	Arabis-Red ☹	03/06/1970	LLNL	NNSS	U9ITS V-26	Shaft
155	Argus I	08/27/1958	LANL/DoD	South Atlantic	----	Rocket
156	Argus II	08/30/1958	LANL/DoD	South Atlantic	----	Rocket
157	Argus III	09/06/1958	LANL/DoD	South Atlantic	----	Rocket
236	Arikaree ☹	05/10/1962	LLNL	NNSS	U9r	Shaft
230	Arkansas	05/02/1962	LLNL	Christmas Island area	----	Airdrop
922	Armada ☹	04/22/1983	LLNL/UK	NNSS	U9cs	Shaft
209	Armadillo ☹	02/09/1962	LANL	NNSS	U3ar	Shaft
655	Arnica-Violet ☹	06/26/1970	LLNL	NNSS	U2dd #3	Shaft
655	Arnica-Yellow ☹	06/26/1970	LLNL	NNSS	U2dd #2	Shaft
712	Arsenate	11/09/1972	LLNL	NNSS	U9ci	Shaft
663	Artesia ☹	12/16/1970	LANL	NNSS	U7x	Shaft
835	Asco	04/25/1978	LLNL	NNSS	U10bc	Shaft
805	Asiago ☹	12/21/1976	LLNL	NNSS	U2ar	Shaft
135	Aspen	06/14/1958	LLNL	Bikini Atoll	----	Barge
707	Atarque ☹	07/25/1972	LANL	NNSS	U3ht	Shaft
909	Atrisco ☹	08/05/1982	LANL	NNSS	U7bp	Shaft
573	Auger	11/15/1968	LANL	NNSS	U3fx	Shaft
384	Auk	10/02/1964	LANL	NNSS	U7b	Shaft
1035	Austin	06/21/1990	LANL	NNSS	U6e	Shaft
664	Avens-Alkermes	12/16/1970	LLNL	NNSS	U9ITS U-24	Shaft
664	Avens-Andorre ☹	12/16/1970	LLNL	NNSS	U9ITS T-28	Shaft
664	Avens-Asmalte ☹	12/16/1970	LLNL	NNSS	U9ITS W-21	Shaft
664	Avens-Cream ☹	12/16/1970	LLNL	NNSS	U9ITS X-29	Shaft
228	Aztec	04/27/1962	LANL	Christmas Island area	----	Airdrop
864	Azul	12/14/1979	LLNL	NNSS	U2em	Shaft
849	Baccarat ☹	01/24/1979	LANL	NNSS	U7ax	Shaft
834	Backbeach	04/11/1978	LANL	NNSS	U19x	Shaft
863	Backgammon ☹	11/29/1979	LANL	NNSS	U3jh	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
16:18:00.00	13.830000	-172.083000	0	10,260	Weapons Related	75 kt	280
22:25:00.03	37.004786	-116.029336	3,962	-1,485	Weapons Related	Less than 20 kt	722
13:20:00.00	37.095488	-116.103616	4,026	300	Weapons Related	16 kt	33
17:00:00.12	37.187905	-116.208633	7,483	-1,319	Weapons Related	2.6 kt	195
18:06:00.00	11.670900	162.199600	0	10	Weapons Related	1.85 Mt	82
13:33:00.05	37.014335	-115.992794	4,009	-792	Weapons Related	Less than 20 kt	675
12:55:00.00	37.095488	-116.103616	4,309	500	Weapons Related	14 kt	57
12:10:00.00	37.053040	-116.103504	4,236	500	Weapons Related	29 kt	62
16:58:00.15	37.124606	-116.040853	4,204	-292	Weapons Related	Low	328
15:00:00.21	37.139529	-116.032156	4,275	-330	Safety Experiment	Less than 20 kt	637
15:00:00.21	37.141741	-116.034879	4,256	-849	Weapons Related	Less than 20 kt	637
15:00:00.21	37.139559	-116.037645	4,238	-820	Weapons Related	Less than 20 kt	637
02:28:00.00	-38.800000	-10.900000	0	~300 miles	Weapons Effects	1-2 kt	155
02:28:00.00	-49.400000	-8.700000	0	~300 miles	Weapons Effects	1-2 kt	156
22:13:00.00	-49.500000	-10.450000	0	~300 miles	Weapons Effects	1-2 kt	157
15:00:00.16	37.127539	-116.049168	4,204	-546	Weapons Related	Low	236
18:01:00.00	1.500000	-157.277000	0	5,030	Weapons Related	1.09 Mt	230
13:53:00.08	37.111465	-116.023298	4,339	-869	Joint US-UK	Less than 20 kt	922
16:30:00.13	37.043530	-116.039826	4,019	-786	Weapons Related	7.1 kt	209
13:00:00.04	37.117085	-116.085023	4,261	-865	Weapons Related	Less than 20 kt	655
13:00:00.04	37.113881	-116.087003	4,255	-1,015	Weapons Related	Less than 20 kt	655
18:15:00.16	37.121398	-116.033196	4,249	-821	Weapons Related	Less than 20 kt	712
16:00:00.09	37.100121	-116.008824	4,360	-1,591	Weapons Related	20 to 200 kt	663
14:35:00.16	37.154518	-116.035630	4,305	-600	Safety Experiment	Less than 20 kt	835
15:09:00.17	37.123863	-116.068328	4,239	-1,083	Weapons Related	Less than 20 kt	805
17:30:00.00	11.697275	165.280000	0	11	Weapons Related	319 kt	135
13:30:00.06	37.012445	-116.015917	3,967	-966	Weapons Related	Less than 20 kt	707
14:00:00.09	37.084158	-116.007415	4,248	-2,099	Weapons Related	138 kt	909
15:30:00.04	37.047616	-116.000707	4,097	-789	Weapons Related	Less than 20 kt	573
20:03:00.04	37.077878	-116.009355	4,203	-1,484	Weapons Related	Less than 20 kt	384
18:15:00.00	36.992788	-116.005363	3,942	-1,150	Weapons Related	Less than 20 kt	1035
16:00:00.17	37.137371	-116.039032	4,227	-1,004	Weapons Related	Less than 20 kt	664
16:00:00.17	37.141771	-116.040368	4,236	-1,245	Weapons Related	Less than 20 kt	664
16:00:00.17	37.134061	-116.036318	4,234	-1,009	Weapons Related	Less than 20 kt	664
16:00:00.17	37.142837	-116.034866	4,260	-961	Plowshare	Less than 20 kt	664
16:02:00.00	1.565000	-157.365000	0	2,610	Weapons Related	410 kt	228
18:00:00.09	37.137325	-116.063944	4,273	-672	Weapons Related	Less than 20 kt	864
18:00:00.10	37.105363	-116.012547	4,389	-1,071	Weapons Related	Less than 20 kt	849
17:45:00.07	37.233439	-116.369355	6,781	-2,204	Weapons Related	20 to 150 kt	834
15:00:00.10	36.993912	-116.024975	3,948	-750	Weapons Related	Less than 20 kt	863

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
366	Backswing ☹	05/14/1964	LLNL	NNSS	U9aw	Shaft
38	Badger	04/18/1953	LANL	NNSS	Area 2	Tower
17	Baker (Operation Buster)	10/28/1951	LANL	NNSS	Area 7	Airdrop
3	Baker (Operation Crossroads)	07/25/1946	LANL/DoD	Bikini Atoll	- - - -	Underwater
8	Baker (Operation Ranger)	01/28/1951	LANL	NNSS	Area 5	Airdrop
24	Baker (Operation Tumbler-Snapper)	04/15/1952	LANL/DoD	NNSS	Area 7	Airdrop
10	Baker-2	02/02/1951	LANL	NNSS	Area 5	Airdrop
678	Baltic	08/06/1971	LLNL	NNSS	U9ITS S-25	Shaft
287	Bandicoot ☹	10/19/1962	LANL	NNSS	U3bj	Shaft
666	Baneberry ☹	12/18/1970	LLNL	NNSS	U8d	Shaft
800	Banon ☹	08/26/1976	LLNL/UK	NNSS	U2dz	Shaft
386	Barbel	10/16/1964	LANL	NNSS	U3bx	Shaft
1030	Barnwell	12/08/1989	LLNL/UK	NNSS	U20az	Shaft
347	Barracuda	12/04/1963	LANL	NNSS	U3cr	Shaft
676	Barranca	08/04/1971	LANL	NNSS	U3he	Shaft
592	Barsac ☹	03/20/1969	LANL	NNSS	U3gc	Shaft
882	Baseball ☹	01/15/1981	LANL	NNSS	U7ba	Shaft
578	Bay Leaf	12/12/1968	LANL	NNSS	U3gq	Shaft
55	Bee	03/22/1955	LANL	NNSS	Area 7	Tower
643	Beebalm	05/01/1970	LANL	NNSS	U3fn	Shaft
631	Belen ☹	02/04/1970	LANL	NNSS	U3br	Shaft
943	Bellow ☹	05/16/1984	LLNL	NNSS	U4ac	Shaft
987	Belmont	10/16/1986	LLNL	NNSS	U20as	Shaft
581	Benham	12/19/1968	LLNL	NNSS	U20c	Shaft
737	Bernal ☹	11/28/1973	LANL	NNSS	U3jy	Shaft
159	Bernalillo	09/17/1958	LANL	NNSS	U3n	Shaft
540	Bevel	04/04/1968	LANL	NNSS	U3fu	Shaft
1042	Bexar	04/04/1991	LANL	NNSS	U19ba	Shaft
586	Biggin	01/30/1969	LLNL	NNSS	U9bz	Shaft
259	Bighorn	06/27/1962	LLNL	Christmas Island area	- - - -	Airdrop
336	Bilby ☹	09/13/1963	LANL	NNSS	U3cn	Shaft
767	Bilge	02/19/1975	LANL	NNSS	U3kc	Shaft
799	Billet	07/27/1976	LANL	NNSS	U7an	Shaft
569	Bit-A	10/31/1968	LANL	NNSS	U3gt	Shaft
569	Bit-B	10/31/1968	LANL	NNSS	U3gt	Shaft
369	Bitterling ☹	06/12/1964	LANL	NNSS	U3cu	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
14:40:00.15	37.117305	-116.039815	4,213	-536	Weapons Related	Less than 20 kt	366
12:35:00.00	37.138372	-116.118258	4,491	300	Weapons Related	23 kt	38
15:20:00.00	37.084950	-116.021125	4,193	1,118	Weapons Related	3.5 kt	17
21:35:00.00	11.589200	165.518200	0	-90	Weapons Effects	21 kt	3
13:52:00.00	36.805100	-115.950200	3,140	1,080	Weapons Related	8 kt	8
17:30:00.00	37.084120	-116.020306	4,193	1,109	Weapons Effects	1 kt	24
13:49:00.00	36.805100	-115.950200	3,140	1,100	Weapons Related	8 kt	10
14:31:00.16	37.138482	-116.041768	4,222	-1,351	Weapons Related	Less than 20 kt	678
18:00:00.08	37.039493	-116.022015	4,008	-792	Weapons Related	12.5 kt	287
15:30:00.20	37.173082	-116.099735	4,574	-912	Weapons Related	10 kt	666
14:30:00.17	37.124960	-116.082867	4,273	-1,761	Joint US-UK	20 to 150 kt	800
15:59:30.04	37.039550	-116.016800	4,007	-849	Weapons Related	Less than 20 kt	386
15:00:00.09	37.231040	-116.410277	6,573	-1,971	Joint US-UK	20 to 150 kt	1030
16:38:30.13	37.043839	-116.013076	4,031	-864	Weapons Related	Low	347
13:30:00.04	37.026025	-116.020422	3,984	-888	Weapons Related	Less than 20 kt	676
18:12:00.04	37.021962	-116.031076	3,982	-998	Weapons Related	Less than 20 kt	592
20:25:00.09	37.087042	-116.045619	4,129	-1,850	Weapons Related	20 to 150 kt	882
15:00:00.04	37.046988	-116.031070	4,023	-427	Safety Experiment	Less than 20 kt	578
13:05:00.00	37.094780	-116.024575	4,245	500	Weapons Related	8 kt	55
14:13:00.04	37.059170	-116.029052	4,054	-1,280	Weapons Related	Less than 20 kt	643
17:00:00.07	37.054972	-116.039711	4,045	-1,381	Weapons Related	20 to 200 kt	631
16:00:00.08	37.092463	-116.094092	4,241	-680	Weapons Related	Less than 20 kt	943
19:25:00.09	37.220157	-116.462524	6,227	-1,985	Weapons Related	20 to 150 kt	987
16:30:00.04	37.231424	-116.474461	6,281	-4,600	Weapons Related	1.15 Mt	581
15:30:00.08	37.010944	-116.025345	3,969	-936	Weapons Related	Less than 20 kt	737
19:30:00.00	37.049512	-116.034010	4,028	-456	Safety Experiment	15 tons	159
15:02:00.04	37.052264	-116.021742	4,043	-790	Weapons Related	Less than 20 kt	540
19:00:00.00	37.296027	-116.313786	7,037	-2,065	Weapons Related	20 to 150 kt	1042
15:17:00.12	37.133257	-116.041124	4,212	-795	Weapons Related	Less than 20 kt	586
15:19:00.00	1.230000	-157.220000	0	11,810	Weapons Related	7.65 Mt	259
17:00:00.13	37.060371	-116.022530	4,074	-2,344	Weapons Related	249 kt	336
20:10:00.22	37.002155	-116.025429	3,957	-1,044	Weapons Related	Less than 20 kt	767
20:30:00.08	37.075322	-116.044686	4,100	-2,088	Weapons Related	20 to 150 kt	799
18:30:00.04	37.046984	-116.030333	4,022	-487	Safety Experiment	Less than 20 kt	569
18:30:00.04	37.046984	-116.030333	4,022	-387	Safety Experiment	Less than 20 kt	569
14:01:00.10	37.038898	-116.013121	4,039	-632	Weapons Related	Less than 20 kt	369

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
229	Black ☹	04/27/1962	LLNL	NNSS	U9p	Shaft
76	Blackfoot	06/12/1956	LANL	Enewetak Atoll	----	Tower
193	Blanca	10/30/1958	LLNL	NNSS	U12e.05	Tunnel
595	Blenton ☹	04/30/1969	LANL	NNSS	U7p	Shaft
289	Bluegill 3 Prime	10/26/1962	LANL/DoD	Johnston Island area	----	Rocket
262	Bluestone	06/30/1962	LLNL	Christmas Island area	----	Airdrop
275	Bobac ☹	08/24/1962	LANL	NNSS	U3bl	Shaft
822	Bobstay ☹	10/26/1977	LANL	NNSS	U3jb	Shaft
989	Bodie	12/13/1986	LLNL	NNSS	U20ap	Shaft
362	Bogey	04/17/1964	LLNL	NNSS	U9au	Shaft
87	Boltzmann	05/28/1957	LANL	NNSS	Area 7	Tower
876	Bonarda ☹	09/25/1980	LANL	NNSS	U3gv	Shaft
355	Bonefish ☹	02/18/1964	LANL	NNSS	U3bt	Shaft
197	Boomer ☹	10/01/1961	LANL	NNSS	U3aa	Shaft
1002	Borate ☹	10/23/1987	LLNL	NNSS	U2ge	Shaft
511	Bordeaux ☹	08/18/1967	LANL	NNSS	U3dr	Shaft
915	Borrego	09/29/1982	LANL	NNSS	U7br	Shaft
486	Bourbon ☹	01/20/1967	LANL	NNSS	U7nS	Shaft
905	Bouschet ☹	05/07/1982	LANL	NNSS	U3la	Shaft
1033	Bowie	04/06/1990	LANL	NNSS	U3mk	Shaft
602	Bowl-1 ☹	06/26/1969	LLNL	NNSS	U2bo #1	Shaft
602	Bowl-2 ☹	06/26/1969	LLNL	NNSS	U2bo #2	Shaft
544	Boxcar	04/26/1968	LLNL	NNSS	U20i	Shaft
674	Bracken	07/09/1971	LLNL	NNSS	U10aq	Shaft
932	Branco ☹	09/21/1983	LLNL	NNSS	U2ew	Shaft
932	Branco-Herkimer ☹	09/21/1983	LLNL	NNSS	U2ew	Shaft
44	Bravo	02/28/1954	LANL	Bikini Atoll	----	Surface
218	Brazos ☹	03/08/1962	LLNL	NNSS	U9d	Shaft
951	Breton ☹	09/13/1984	LLNL	NNSS	U4ar	Shaft
996	Brie ☹	06/18/1987	LLNL	NNSS	U10cc	Shaft
1048	Bristol	11/26/1991	LLNL/UK	NNSS	U4av	Shaft
423	Bronze ☹	07/23/1965	LANL	NNSS	U7f	Shaft
529	Brush	01/24/1968	LANL	NNSS	U3eq	Shaft
435	Buff ☹	12/16/1965	LANL	NNSS	U3dh	Shaft
536	Buggy-A	03/12/1968	LLNL	NNSS	U30a	Crater
536	Buggy-B	03/12/1968	LLNL	NNSS	U30b	Crater
536	Buggy-C	03/12/1968	LLNL	NNSS	U30c	Crater
536	Buggy-D	03/12/1968	LLNL	NNSS	U30d	Crater
536	Buggy-E	03/12/1968	LLNL	NNSS	U30e	Crater
811	Bulkhead	04/27/1977	LANL	NNSS	U7am	Shaft

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Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
18:00:00.16	37.118411	-116.038640	4,217	-714	Weapons Related	Low	229
18:26:00.00	11.547200	162.352050	10	200	Weapons Related	8 kt	76
15:00:00.15	37.185883	-116.202885	7,126	-987	Weapons Related	22 kt	193
17:00:00.04	37.081476	-116.014810	4,205	-1,830	Weapons Related	20 to 200 kt	595
09:59:00.00	16.468422	-169.630075	0	tens of miles	Weapons Effects	Submegaton	289
15:21:00.00	1.380000	-157.195000	0	4,980	Weapons Related	1.27 Mt	262
17:00:00.13	37.046097	-116.024707	4,021	-676	Weapons Related	Low	275
14:15:00.08	37.007554	-116.017572	3,961	-1,251	Weapons Related	Less than 20 kt	822
17:50:05.09	37.262907	-116.412571	6,621	-2,083	Weapons Related	20 to 150 kt	989
15:29:52.28	37.119437	-116.034762	4,238	-391	Weapons Related	Less than 20 kt	362
11:55:00.00	37.094825	-116.024500	4,235	500	Weapons Related	12 kt	87
14:45:00.09	37.056117	-116.048955	4,057	-1,250	Weapons Related	20 to 150 kt	876
15:37:19.12	37.059338	-116.034192	4,050	-987	Weapons Related	Less than 20 kt	355
21:30:00.12	37.048294	-116.035380	4,028	-330	Weapons Related	Low	197
16:00:00.09	37.141850	-116.079570	4,335	-1,780	Weapons Related	20 to 150 kt	1002
20:12:30.04	37.012107	-116.037327	3,970	-1,089	Weapons Related	Less than 20 kt	511
13:30:00.10	37.091256	-116.045756	4,137	-1,848	Weapons Related	Less than 150 kt	915
17:40:04.41	37.099826	-116.004708	4,374	-1,836	Weapons Related	20 to 200 kt	486
18:17:00.11	37.069013	-116.046331	4,083	-1,850	Weapons Related	20 to 150 kt	905
17:00:00.04	37.067623	-115.992991	4,257	-700	Weapons Related	Less than 20 kt	1033
16:00:00.13	37.162437	-116.079494	4,407	-650	Weapons Related	Less than 20 kt	602
16:00:00.13	37.160733	-116.080021	4,402	-750	Weapons Related	Less than 20 kt	602
15:00:00.07	37.295373	-116.456591	6,370	-3,825	Weapons Related	1.3 Mt	544
14:00:00.16	37.164403	-116.033602	4,342	-1,000	Weapons Related	Less than 20 kt	674
16:25:00.08	37.121309	-116.056452	4,209	-960	Weapons Related	Less than 20 kt	932
16:25:00.08	37.121309	-116.056452	4,209	-1,400	Weapons Related	Less than 20 kt	932
18:45:00.00	11.697130	165.274200	10	7	Weapons Related	15 Mt	44
18:00:00.21	37.122117	-116.049750	4,201	-840	Weapons Related	8.4 kt	218
14:00:00.00	37.086639	-116.072046	4,149	-1,585	Weapons Related	20 to 150 kt	951
15:20:00.08	37.193506	-116.035883	4,413	-666	Weapons Related	Less than 20 kt	996
18:35:00.07	37.096440	-116.070481	4,177	-1,500	Joint US-UK	Less than 20 kt	1048
17:00:00.04	37.097785	-116.033872	4,213	-1,742	Weapons Related	20 to 200 kt	423
15:00:00.04	37.042747	-116.014798	4,021	-388	Weapons Related	Less than 20 kt	529
19:15:00.04	37.072497	-116.029969	4,102	-1,642	Weapons Related	20 to 200 kt	435
17:04:00.11	37.007336	-116.370794	5,210	-165	Plowshare	1.08 kt	536
17:04:00.11	37.007471	-116.371259	5,210	-165	Plowshare	1.08 kt	536
17:04:00.11	37.007617	-116.371740	5,210	-165	Plowshare	1.08 kt	536
17:04:00.11	37.007772	-116.372234	5,210	-165	Plowshare	1.08 kt	536
17:04:00.11	37.007913	-116.372713	5,210	-165	Plowshare	1.08 kt	536
15:00:00.08	37.094739	-116.028751	4,219	-1,950	Weapons Related	20 to 150 kt	811

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
1015	Bullfrog ☹	08/30/1988	LLNL	NNSS	U4au	Shaft
1034	Bullion	06/13/1990	LLNL	NNSS	U20bd	Shaft
282	Bumping	10/06/1962	LLNL	Johnston Island area	----	Airdrop
354	Bunker ☹	02/13/1964	LLNL	NNSS	U9bb	Shaft
857	Burzet ☹	08/03/1979	LLNL	NNSS	U4ai	Shaft
413	Buteo	05/12/1965	LANL	NNSS	U20a	Shaft
123	Butternut	05/11/1958	LANL	Enewetak Atoll	----	Barge
373	Bye ☹	07/16/1964	LLNL	NNSS	U10i	Shaft
898	Caboc ☹	12/16/1981	LLNL	NNSS	U2cp	Shaft
920	Cabra	03/26/1983	LLNL	NNSS	U20aj	Shaft
727	Cabresto	05/24/1973	LANL	NNSS	U7h	Shaft
769	Cabrillo ☹	03/07/1975	LLNL	NNSS	U2dr	Shaft
530	Cabriolet	01/26/1968	LLNL	NNSS	U20l	Crater
121	Cactus	05/05/1958	LANL	Enewetak Atoll	----	Surface
618	Calabash ☹	10/29/1969	LLNL	NNSS	U2av	Shaft
291	Calamity	10/27/1962	LLNL	Johnston Island area	----	Airdrop
414	Cambric	05/14/1965	LLNL	NNSS	U5e	Shaft
779	Camembert	06/26/1975	LLNL	NNSS	U19q	Shaft
671	Camphor	06/29/1971	LLNL/SNL/DoD	NNSS	U12g.10	Tunnel
828	Campos	02/13/1978	LLNL	NNSS	U9cp	Shaft
870	Canfield ☹	05/02/1980	LANL	NNSS	U3kx	Shaft
642	Can-Green ☹	04/21/1970	LLNL	NNSS	U2dd #1	Shaft
642	Can-Red ☹	04/21/1970	LLNL	NNSS	U2dd #4	Shaft
662	Canjilon	12/16/1970	LANL	NNSS	U3fq	Shaft
713	Canna-Limoges	11/17/1972	LLNL	NNSS	U9ITS YZ-26	Shaft
713	Canna-Umbrinus	11/17/1972	LLNL	NNSS	U9ITS YZ-26	Shaft
685	Cannikin	11/06/1971	LLNL	Amchitka, Alaska	----	Shaft
378	Canvasback	08/22/1964	LANL	NNSS	U3cp	Shaft
703	Capitan	06/28/1972	LANL	NNSS	U3jj	Shaft
944	Caprock ☹	05/31/1984	LANL	NNSS	U4q	Shaft
309	Carmel ☹	02/21/1963	LLNL	NNSS	U2h	Shaft
814	Carnelian ☹	07/28/1977	LLNL	NNSS	U4af	Shaft
337	Carp	09/27/1963	LANL	NNSS	U3cb	Shaft
665	Carpetbag ☹	12/17/1970	LLNL	NNSS	U2dg	Shaft
661	Carrizozo ☹	12/03/1970	LANL	NNSS	U3hr	Shaft
399	Cashmere ☹	02/04/1965	LLNL	NNSS	U2ad	Shaft
303	Casselmann ☹	02/08/1963	LLNL	NNSS	U10g	Shaft
394	Cassowary	12/16/1964	LANL	NNSS	U3bn	Shaft
683	Cathay	10/08/1971	LLNL	NNSS	U9ch	Shaft
182	Catron	10/24/1958	LANL	NNSS	Area 3	Tower

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
18:00:00.09	37.085884	-116.069388	4,145	-1,605	Weapons Related	Less than 150 kt	1015
16:00:00.09	37.261551	-116.421002	6,486	-2,211	Weapons Related	20 to 150 kt	1034
16:03:00.00	14.670000	-168.250000	0	9,900	Weapons Related	11.3 kt	282
15:30:00.15	37.131968	-116.033210	4,254	-743	Weapons Related	Less than 20 kt	354
15:07:30.16	37.083902	-116.070757	4,142	-1,475	Weapons Related	20 to 150 kt	857
18:15:00.10	37.242607	-116.431741	6,520	-2,282	Weapons Related	Less than 20 kt	413
18:15:00.00	11.542700	162.338600	0	10	Weapons Related	81 kt	123
13:15:00.15	37.182162	-116.046217	4,335	-1,282	Weapons Related	20 to 200 kt	373
21:05:00.09	37.114478	-116.123752	4,510	-1,099	Weapons Related	Less than 20 kt	898
20:20:00.09	37.300630	-116.460926	6,345	-1,781	Weapons Related	20 to 150 kt	920
13:30:00.04	37.078000	-116.031637	4,118	-649	Weapons Related	Less than 20 kt	727
15:00:00.17	37.133964	-116.085117	4,313	-1,970	Weapons Related	20 to 200 kt	769
16:00:00.11	37.280797	-116.515339	6,197	-170	Plowshare	2.3 kt	530
18:15:00.00	11.697130	165.274200	5	3	Weapons Related	18 kt	121
22:01:51.04	37.143270	-116.064717	4,298	-2,050	Weapons Related	110 kt	618
15:46:00.00	14.700000	-168.417000	0	11,780	Weapons Related	800 kt	291
14:57:52.15	36.823339	-115.967700	3,137	-967	Weapons Related	750 tons	414
12:30:00.16	37.278875	-116.369471	6,758	-4,304	Weapons Related	200 to 1,000 kt	779
18:30:00.16	37.176732	-116.212366	7,600	-1,390	Weapons Effects	Less than 20 kt	671
21:53:00.16	37.126070	-116.032608	4,253	-1,049	Weapons Related	Less than 20 kt	828
18:46:30.09	37.055962	-116.019826	4,060	-1,150	Weapons Related	Less than 20 kt	870
15:00:00.04	37.112323	-116.082967	4,243	-900	Weapons Related	20 to 200 kt	642
15:00:00.04	37.115532	-116.081005	4,249	-1,310	Weapons Related	20 to 200 kt	642
16:00:00.05	37.072475	-116.025859	4,116	-991	Weapons Related	Less than 20 kt	662
18:00:00.16	37.139535	-116.033233	4,265	-700	Safety Experiment	Less than 20 kt	713
18:00:00.16	37.139535	-116.033233	4,265	-600	Weapons Related	Less than 20 kt	713
22:00:00.06	51.470200	179.103800	208	-5,873	Weapons Related	Less than 5 Mt	685
22:17:00.06	37.065281	-116.016319	4,113	-1,469	Weapons Related	Less than 20 kt	378
14:41:00.19	36.992556	-116.023017	3,946	-441	Weapons Related	Less than 20 kt	703
13:04:00.10	37.103086	-116.048917	4,146	-1,968	Weapons Related	20 to 150 kt	944
19:47:08.63	37.154760	-116.080754	4,390	-536	Weapons Related	Low	309
14:07:00.16	37.097534	-116.091825	4,238	-684	Weapons Related	Less than 20 kt	814
14:20:00.13	37.037266	-116.016562	4,002	-1,081	Weapons Related	Low	337
16:05:00.16	37.129083	-116.083868	4,302	-2,170	Weapons Related	220 kt	665
15:07:00.00	37.006083	-116.040798	3,970	-916	Weapons Related	Less than 20 kt	661
15:30:00.11	37.130698	-116.062466	4,256	-762	Weapons Related	Less than 20 kt	399
16:00:00.16	37.148826	-116.052745	4,247	-994	Weapons Related	Low	303
20:00:00.07	37.039511	-116.024762	4,005	-493	Weapons Related	Less than 20 kt	394
14:30:00.15	37.113742	-116.038198	4,226	-1,240	Weapons Related	Less than 20 kt	683
15:00:00.00	37.042800	-116.027800	4,026	73	Safety Experiment	21 tons	182

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
708	Cebolla	08/09/1972	LANL	NNSS	U3jc	Shaft
966	Cebrero	08/14/1985	LLNL	NNSS	U9cw	Shaft
143	Cedar	07/02/1958	LLNL	Bikini Atoll	----	Barge
426	Centaur ☐	08/27/1965	LLNL	NNSS	U2ak	Shaft
184	Ceres	10/26/1958	LLNL	NNSS	Area 8	Tower
478	Cerise ☐	11/18/1966	LANL	NNSS	U3eu	Shaft
893	Cernada	09/24/1981	LANL	NNSS	U3kk	Shaft
911	Cerro	09/02/1982	LANL	NNSS	U3lf	Shaft
688	Chaenactis ☐	12/14/1971	LLNL	NNSS	U2dl	Shaft
286	Chama	10/18/1962	LANL	Johnston Island area	----	Airdrop
967	Chamita ☐	08/17/1985	LANL	NNSS	U3lz	Shaft
930	Chancellor	09/01/1983	LANL	NNSS	U19ad	Shaft
682	Chantilly ☐	09/29/1971	LLNL	NNSS	U2di	Shaft
428	Charcoal ☐	09/10/1965	LANL/UK	NNSS	U7g	Shaft
114	Charleston	09/28/1957	LLNL	NNSS	Area 9	Balloon
18	Charlie (Operation Buster)	10/30/1951	LANL	NNSS	Area 7	Airdrop
25	Charlie (Operation Tumbler-Snapper)	04/22/1952	LANL/DoD	NNSS	Area 7	Airdrop
457	Chartreuse	05/06/1966	LANL	NNSS	U19d	Shaft
554	Chateaugay	06/28/1968	LLNL	NNSS	U20t	Shaft
591	Chatty ☐	03/18/1969	LLNL	NNSS	U2bn	Shaft
187	Chaves (Chavez)	10/27/1958	LANL	NNSS	Area 3	Tower
288	Checkmate	10/20/1962	LANL/DoD	Johnston Island area	----	Rocket
919	Cheedam ☐	02/17/1983	LLNL	NNSS	U2et	Shaft
198	Chena	10/10/1961	LLNL	NNSS	U12b.09	Tunnel
410	Chenille ☐	04/22/1965	LLNL	NNSS	U9bg	Shaft
70	Cherokee	05/20/1956	LANL/DoD	Bikini Atoll	----	Airdrop
791	Cheshire	02/14/1976	LLNL	NNSS	U20n	Shaft
855	Chess	06/20/1979	LANL	NNSS	U7at	Shaft
243	Chetco	05/19/1962	LLNL	Christmas Island area	----	Airdrop
803	Chevre ☐	11/23/1976	LLNL	NNSS	U10ay	Shaft
786	Chiberta ☐	12/20/1975	LLNL	NNSS	U2ek	Shaft
211	Chinchilla ☐	02/19/1962	LANL	NNSS	U3ag	Shaft
221	Chinchilla II ☐	03/31/1962	LANL	NNSS	U3as	Shaft
307	Chipmunk	02/15/1963	LANL	NNSS	U3ay	Shaft
497	Chocolate ☐	04/21/1967	LANL	NNSS	U3es	Shaft
213	Cimarron ☐	02/23/1962	LLNL	NNSS	U9h	Shaft
444	Cinnamon	03/07/1966	LANL	NNSS	U3dm	Shaft
883	Clairette	02/05/1981	LANL	NNSS	U3kr	Shaft

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Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
13:31:10.04	37.007141	-116.019897	3,962	-941	Weapons Related	Less than 20 kt	708
13:00:00.08	37.111034	-116.015246	4,405	-599	Weapons Related	Less than 20 kt	966
17:30:00.00	11.697275	165.280000	0	11	Weapons Related	220 kt	143
13:51:13.11	37.137259	-116.070943	4,299	-564	Weapons Related	Less than 20 kt	426
04:00:00.00	37.181329	-116.069535	4,428	25	Safety Experiment	0.7 tons	184
15:02:00.04	37.042727	-116.011200	4,031	-693	Weapons Related	Less than 20 kt	478
15:00:00.09	37.008471	-116.024667	3,964	-699	Weapons Related	Less than 20 kt	893
14:00:00.09	37.019686	-116.016537	3,975	-750	Weapons Related	Less than 20 kt	911
21:09:59.16	37.123899	-116.090425	4,291	-1,086	Weapons Related	20 to 200 kt	688
16:01:00.00	14.670000	-168.750000	0	11,970	Weapons Related	1.59 Mt	286
16:25:00.09	37.002253	-116.043912	3,964	-1,088	Weapons Related	Less than 20 kt	967
14:00:00.08	37.272710	-116.355916	6,692	-2,046	Weapons Related	143 kt	930
14:30:00.14	37.124433	-116.087848	4,288	-1,085	Weapons Related	Less than 20 kt	682
17:12:00.03	37.077921	-116.017582	4,172	-1,494	Joint US-UK	20 to 200 kt	428
13:00:00.00	37.134742	-116.041648	4,215	1,500	Weapons Related	12 kt	114
15:00:00.00	37.084950	-116.021250	4,193	1,132	Weapons Related	14 kt	18
17:30:00.00	37.084400	-116.021143	4,193	3,447	Weapons Related	31 kt	25
15:00:00.08	37.347938	-116.322827	6,861	-2,188	Weapons Related	73 kt	457
12:22:00.08	37.245458	-116.483751	6,245	-1,992	Weapons Related	20 to 200 kt	554
14:40:00.43	37.162228	-116.076753	4,394	-639	Weapons Related	Less than 20 kt	591
14:30:00.00	37.044600	-116.030650	4,025	52	Safety Experiment	0.6 tons	187
08:30:00.00	16.072381	-169.609986	0	tens of miles	Weapons Effects	Low	288
17:00:00.09	37.162769	-116.064219	4,332	-1,125	Weapons Related	Less than 20 kt	919
18:00:00.13	37.194242	-116.207891	7,472	-838	Weapons Related	Low	198
13:39:00.10	37.111374	-116.031359	4,276	-462	Weapons Related	Less than 20 kt	410
17:51:00.00	11.723000	165.306000	0	4,350	Weapons Related	3.8 Mt	70
11:30:00.16	37.242582	-116.421101	6,477	-3,829	Weapons Related	200 to 500 kt	791
15:00:13.54	37.107580	-116.015958	4,384	-1,100	Weapons Related	Less than 20 kt	855
15:36:00.00	1.565000	-157.365000	0	6,945	Weapons Related	73 kt	243
15:15:00.16	37.171658	-116.053542	4,281	-1,040	Weapons Related	Less than 20 kt	803
20:00:00.16	37.127602	-116.062439	4,237	-2,350	Weapons Related	20 to 200 kt	786
16:30:00.13	37.049006	-116.030398	4,030	-492	Weapons Related	1.9 kt	211
18:00:00.13	37.046862	-116.037770	4,026	-448	Weapons Related	Low	221
17:00:00.13	37.048966	-116.032619	4,028	-195	Safety Experiment	Low	307
15:09:00.04	37.019257	-116.038296	3,979	-789	Weapons Related	Less than 20 kt	497
18:00:00.16	37.128808	-116.049178	4,208	-1,000	Weapons Related	11.9 kt	213
18:41:00.04	37.034601	-116.031660	4,000	-393	Safety Experiment	Less than 20 kt	444
18:00:00.12	37.010848	-116.033049	3,968	-1,160	Weapons Related	Less than 20 kt	883

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
547	Clarksmobile ☹	05/17/1968	LLNL	NNSS	U2as	Shaft
323	Clean Slate I	05/25/1963	LANL/DoD/UK	NTTR	----	Surface
325	Clean Slate II	05/31/1963	LANL/DoD/UK	NTTR	----	Surface
329	Clean Slate III	06/09/1963	LANL/DoD/UK	NTTR	----	Surface
341	Clearwater	10/16/1963	LLNL	NNSS	U12q	Shaft
43	Climax	06/04/1953	LANL	NNSS	Area 7	Airdrop
352	Club ☹	01/30/1964	LLNL	NNSS	U2aa	Shaft
445	Clymer ☹	03/12/1966	LLNL	NNSS	U9ce	Shaft
918	Coalora ☹	02/11/1983	LANL	NNSS	U3lo	Shaft
522	Cobbler	11/08/1967	LANL	NNSS	U7u	Shaft
212	Codsaw ☹	02/19/1962	LLNL	NNSS	U9g	Shaft
593	Coffer ☹	03/21/1969	LLNL	NNSS	U2de	Shaft
520	Cognac	10/25/1967	LANL	NNSS	U3fm	Shaft
794	Colby	03/14/1976	LLNL	NNSS	U20aa	Shaft
167	Colfax	10/05/1958	LANL	NNSS	U3k	Shaft
723	Colmor ☹	04/26/1973	LANL	NNSS	U3hv	Shaft
869	Colwick	04/26/1980	LLNL/UK	NNSS	U20ac	Shaft
500	Commodore ☹	05/20/1967	LLNL	NNSS	U2am	Shaft
1009	Comstock	06/02/1988	LLNL	NNSS	U20ay	Shaft
847	Concentration ☹	12/01/1978	LANL	NNSS	U3kn	Shaft
1025	Contact	06/22/1989	LLNL	NNSS	U20aw	Shaft
661	Corazon	12/03/1970	LANL	NNSS	U3ha	Shaft
433	Corduroy ☹	12/03/1965	LLNL	NNSS	U10k	Shaft
374	Cormorant	07/17/1964	LANL/UK	NNSS	U3df	Shaft
648	Cornice-Green ☹	05/15/1970	LLNL	NNSS	U10ap #3	Shaft
648	Cornice-Yellow ☹	05/15/1970	LLNL	NNSS	U10ap #1	Shaft
983	Cornucopia ☹	07/24/1986	LLNL	NNSS	U2gaS	Shaft
948	Correo ☹	08/02/1984	LANL	NNSS	U3lw	Shaft
1041	Coso-Bronze ☹	03/08/1991	LLNL	NNSS	U4an	Shaft
1041	Coso-Gray ☹	03/08/1991	LLNL	NNSS	U4an	Shaft
1041	Coso-Silver ☹	03/08/1991	LLNL	NNSS	U4an	Shaft
958	Cottage ☹	03/23/1985	LLNL	NNSS	U8j	Shaft
92	Coulomb-A	07/01/1957	LANL	NNSS	Area 3	Surface
108	Coulomb-B	09/06/1957	LANL	NNSS	S3g	Surface
117	Coulomb-C	12/09/1957	LANL	NNSS	S3i	Surface
821	Coulommiers ☹	09/27/1977	LLNL	NNSS	U2ei	Shaft
383	Courser	09/25/1964	LANL/UK	NNSS	U3do	Shaft

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Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
13:00:00.00	37.120001	-116.059701	4,218	-1,551	Weapons Related	20 to 200 kt	547
11:17:00.00	37.708495	-116.657860	5,380	1	Joint US-UK (Storage Transportation)	Zero	323
10:47:00.00	37.761125	-116.614428	5,390	1	Joint US-UK (Storage Transportation)	Zero	325
10:33:00.00	37.759156	-116.681135	5,387	1	Joint US-UK (Storage Transportation)	Zero	329
17:00:00.14	37.198125	-116.230391	7,414	-1,788	Weapons Related	Intermediate	341
11:15:00.00	37.087549	-116.019208	4,025	1,334	Weapons Related	61 kt	43
16:00:00.15	37.136163	-116.071528	4,296	-592	Weapons Related	Less than 20 kt	352
18:04:13.11	37.143627	-116.053391	4,242	-1,303	Weapons Related	Less than 20 kt	445
16:00:00.10	37.056103	-116.046214	4,058	-899	Weapons Related	Less than 20 kt	918
15:00:00.04	37.091760	-116.036669	4,164	-2,189	Weapons Related	Less than 20 kt	522
17:50:00.16	37.127406	-116.037989	4,217	-696	Weapons Related	Low	212
14:30:00.41	37.133171	-116.087531	4,323	-1,525	Weapons Related	Less than 100 kt	593
14:30:00.14	37.049749	-116.040443	4,034	-789	Weapons Related	Less than 20 kt	520
12:30:00.16	37.305939	-116.472375	6,337	-4,174	Weapons Related	500 to 1,000 kt	794
16:15:00.00	37.048795	-116.035040	4,029	-350	Safety Experiment	5.5 tons	167
15:15:00.04	37.012101	-116.020835	3,968	-806	Weapons Related	Less than 20 kt	723
17:00:00.08	37.248374	-116.423288	6,473	-2,077	Joint US-UK	20 to 150 kt	869
15:00:00.20	37.130361	-116.064819	4,258	-2,445	Weapons Related	250 kt	500
13:00:00.09	37.260082	-116.441965	6,521	-2,035	Weapons Related	Less than 150 kt	1009
17:07:30.07	37.029621	-116.025000	3,991	-812	Weapons Related	Less than 20 kt	847
21:15:00.08	37.282822	-116.413194	6,585	-1,785	Weapons Related	20 to 150 kt	1025
15:07:00.04	37.001952	-116.038777	3,961	-791	Weapons Related	Less than 20 kt	661
15:13:02.10	37.164690	-116.053221	4,273	-2,227	Weapons Related	20 to 200 kt	433
17:18:30.03	37.017564	-116.030428	3,975	-891	Joint US-UK	Less than 20 kt	374
13:30:00.17	37.161873	-116.039722	4,306	-1,455	Weapons Related	20 to 200 kt	648
13:30:00.17	37.165879	-116.036360	4,329	-1,280	Weapons Related	20 to 200 kt	648
15:05:00.09	37.142700	-116.071988	4,312	-1,248	Weapons Related	Less than 20 kt	983
15:00:00.09	37.016758	-116.008512	3,967	-1,096	Weapons Related	Less than 20 kt	948
21:02:45.08	37.104317	-116.074901	4,204	-1,093	Weapons Related	Less than 20 kt	1041
21:02:45.08	37.104317	-116.074901	4,204	-1,450	Weapons Related	Less than 20 kt	1041
21:02:45.08	37.104317	-116.074901	4,204	-1,559	Safety Experiment	Less than 20 kt	1041
18:30:00.08	37.179926	-116.089828	4,556	-1,690	Weapons Related	20 to 150 kt	958
17:30:00.00	37.041200	-116.026880	4,000	0	Safety Experiment	Zero	92
20:05:00.00	37.042900	-116.027100	4,035	3	Safety Experiment	300 tons	108
20:00:00.00	37.048200	-116.025200	4,050	0	Safety Experiment	500 tons	117
14:00:00.16	37.151117	-116.068429	4,327	-1,740	Weapons Related	20 to 150 kt	821
17:02:00.03	37.072423	-116.016258	4,148	-1,178	Joint US-UK	Zero	383

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
808	Cove ☹	02/16/1977	LANL	NNSS	U3ki	Shaft
692	Cowles ☹	02/03/1972	LANL	NNSS	U3hx	Shaft
314	Coypu	04/10/1963	LANL	NNSS	U3af	Shaft
842	Cremino	09/27/1978	LLNL	NNSS	U8e	Shaft
842	Cremino-Caerphilly	09/27/1978	LLNL	NNSS	U8e	Shaft
391	Crepe ☹	12/05/1964	LLNL	NNSS	U2q	Shaft
754	Crestlake-Briar ☹	07/18/1974	LLNL	NNSS	U2dw	Shaft
754	Crestlake-Tansan ☹	07/18/1974	LLNL	NNSS	U2dw	Shaft
571	Crew ☹	11/04/1968	LLNL	NNSS	U2db	Shaft
572	Crew-2nd ☹	11/04/1968	LLNL	NNSS	U2db	Shaft
572	Crew-3rd ☹	11/04/1968	LLNL	NNSS	U2db	Shaft
812	Crewline	05/25/1977	LANL	NNSS	U7ap	Shaft
546	Crock ☹	05/08/1968	LLNL	NNSS	U10ak	Shaft
923	Crowdie ☹	05/05/1983	LLNL	NNSS	U2fe	Shaft
616	Cruet ☹	10/29/1969	LLNL	NNSS	U2cn	Shaft
708	Cuchillo	08/09/1972	LANL	NNSS	U3jt	Shaft
623	Culantro-A	12/10/1969	LANL	NNSS	U3hi-a	Shaft
623	Culantro-B	12/10/1969	LANL	NNSS	U3hi-b	Shaft
634	Cumarin ☹	02/25/1970	LANL	NNSS	U3gz	Shaft
315	Cumberland ☹	04/11/1963	LLNL	NNSS	U2e	Shaft
406	Cup ☹	03/26/1965	LLNL	NNSS	U9cb	Shaft
636	Cyathus ☹	03/06/1970	LLNL	NNSS	U8b	Shaft
982	Cybar	07/17/1986	LANL	NNSS	U19ar	Shaft
456	Cyclamen ☹	05/05/1966	LANL	NNSS	U3cx	Shaft
589	Cypress	02/12/1969	LLNL/SNL/DoD	NNSS	U12g.09	Tunnel
473	Daiquiri	09/23/1966	LANL	NNSS	U7o	Shaft
80	Dakota	06/25/1956	LANL	Bikini Atoll	----	Barge
1016	Dalhart ☹	10/13/1988	LANL	NNSS	U4u	Shaft
257	Daman I ☹	06/21/1962	LANL	NNSS	U3be	Shaft
926	Danablu ☹	06/09/1983	LLNL	NNSS	U2eu	Shaft
216	Danny Boy	03/05/1962	LLNL/DoD	NNSS	U18a	Crater
981	Darwin	06/25/1986	LLNL/UK	NNSS	U20aq	Shaft
880	Dauphin ☹	11/14/1980	LLNL	NNSS	U9cq	Shaft
186	De Baca	10/26/1958	LANL	NNSS	Area 7	Balloon
226	Dead ☹	04/21/1962	LLNL	NNSS	U9k	Shaft
783	Deck ☹	11/18/1975	LANL	NNSS	U3kd	Shaft
993	Delamar	04/18/1987	LLNL	NNSS	U20at	Shaft
710	Delphinium ☹	09/26/1972	LLNL	NNSS	U2dp	Shaft
472	Derringer	09/12/1966	LANL/SNL/DoD	NNSS	U5i	Shaft
253	Des Moines	06/13/1962	LLNL	NNSS	U12j.01	Tunnel

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
17:53:00.16	37.006589	-116.032235	3,963	-1,098	Weapons Related	Less than 20 kt	808
21:45:00.04	37.001028	-116.020291	3,955	-990	Weapons Related	Less than 20 kt	692
16:01:30.12	37.048763	-116.031182	4,028	-245	Safety Experiment	Low	314
16:30:00.17	37.170963	-116.088036	4,488	-688	Weapons Related	Less than 20 kt	842
16:30:00.17	37.170963	-116.088036	4,488	-1,377	Weapons Related	Less than 20 kt	842
21:15:00.10	37.114376	-116.054313	4,195	-1,326	Weapons Related	20 to 200 kt	391
14:00:01.20	37.119205	-116.086002	4,269	-1,226	Weapons Related	Less than 20 kt	754
14:00:01.20	37.119205	-116.086002	4,269	-891	Weapons Related	Less than 20 kt	754
15:15:00.09	37.130426	-116.087381	4,312	-1,977	Weapons Related	20 to 200 kt	571
15:16:00.09	37.130426	-116.087381	4,312	-1,177	Weapons Related	Less than 20 kt	572
15:16:00.09	37.130426	-116.087381	4,312	-1,177	Weapons Related	Less than 20 kt	572
17:00:00.08	37.094280	-116.045731	4,148	-1,851	Weapons Related	20 to 150 kt	812
14:10:00.00	37.157276	-116.035786	4,317	-596	Weapons Related	Less than 20 kt	546
15:20:00.08	37.145593	-116.090089	4,383	-1,280	Weapons Related	Less than 20 kt	923
19:30:00.04	37.121466	-116.128621	4,589	-865	Weapons Related	11 kt	616
13:31:10.04	37.003705	-116.019923	3,957	-652	Weapons Related	Less than 20 kt	708
15:00:00.04	37.014671	-116.003735	3,964	-440	Weapons Related	Less than 20 kt	623
15:00:00.04	37.014865	-116.002020	3,967	-490	Weapons Related	Less than 20 kt	623
14:28:38.04	37.036627	-116.000460	4,045	-1,340	Weapons Related	20 to 200 kt	634
16:03:00.16	37.156630	-116.071834	4,352	-745	Weapons Related	Low	315
15:34:08.16	37.147554	-116.043762	4,245	-1,775	Weapons Related	20 to 200 kt	406
14:24:00.94	37.173070	-116.092626	4,527	-964	Weapons Related	8.7 kt	636
21:00:00.06	37.278620	-116.356493	6,707	-2,057	Weapons Related	119 kt	982
14:00:00.04	37.050572	-116.038720	4,036	-1,001	Weapons Related	12 kt	456
16:18:20.88	37.169003	-116.211623	7,519	-1,350	Weapons Effects	Less than 20 kt	589
18:00:00.04	37.103299	-116.036570	4,223	-1,841	Weapons Related	Less than 20 kt	473
18:06:00.00	11.679000	165.391500	0	10	Weapons Related	1.1 Mt	80
14:00:00.08	37.088950	-116.050132	4,120	-2,099	Weapons Related	Less than 150 kt	1016
17:00:00.13	37.043017	-116.031123	4,016	-854	Weapons Related	Low	257
17:10:00.09	37.157569	-116.090101	4,441	-1,050	Weapons Related	Less than 20 kt	926
18:15:00.12	37.111003	-116.365835	5,384	-110	Weapons Effects	430 tons	216
20:27:45.09	37.264530	-116.500200	6,155	-1,801	Joint US-UK	20 to 150 kt	981
16:50:00.08	37.111444	-116.019526	4,372	-1,050	Weapons Related	Less than 20 kt	880
16:00:00.00	37.086540	-116.024805	4,186	1,500	Weapons Related	2.2 kt	186
18:40:00.16	37.118958	-116.032393	4,261	-635	Weapons Related	Low	226
15:30:00.11	37.020263	-116.021499	3,958	-1,070	Weapons Related	Less than 20 kt	783
13:40:00.00	37.247830	-116.510033	6,240	-1,785	Weapons Related	20 to 150 kt	993
14:30:00.16	37.121323	-116.086603	4,276	-970	Weapons Related	15 kt	710
15:30:00.05	36.875842	-115.951559	3,395	-837	Weapons Effects	7.8 kt	472
21:00:00.12	37.222177	-116.163010	6,312	-660	Weapons Related	2.9 kt	253

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
668	Dexter	06/23/1971	LANL	NNSS	U3hs	Shaft
94	Diablo	07/15/1957	LLNL	NNSS	Area 2	Tower
841	Diablo Hawk	09/13/1978	LLNL/DoD	NNSS	U12n.10a	Tunnel
686	Diagonal Line	11/24/1971	LLNL/DoD	NNSS	U11g	Shaft
912	Diamond Ace	09/23/1982	LLNL/DoD	NNSS	U12n.15	Tunnel
970	Diamond Beech	10/09/1985	LLNL/DoD	NNSS	U12n.19	Tunnel
647	Diamond Dust	05/12/1970	LANL/DoD	NNSS	U16a.05	Tunnel
1050	Diamond Fortune	04/30/1992	LANL/DoD	NNSS	U12p.05	Tunnel
672	Diamond Mine	07/01/1971	LANL/DoD	NNSS	U16a.06	Tunnel
706	Diamond Sculls	07/20/1972	LLNL/DoD	NNSS	U12t.02	Tunnel
633	Diana Mist	02/11/1970	LANL/DoD	NNSS	U12n.06	Tunnel
559	Diana Moon	08/27/1968	LLNL/DoD	NNSS	U11e	Shaft
693	Dianthus ☾	02/17/1972	LLNL	NNSS	U10at	Shaft
729	Dido Queen	06/05/1973	LLNL/DoD	NNSS	U12e.14	Tunnel
622	Diesel Train	12/05/1969	LANL/DoD	NNSS	U12e.11	Tunnel
419	Diluted Waters ☾	06/16/1965	LLNL/DoD	NNSS	U5b	Shaft
770	Dining Car	04/05/1975	LLNL/DoD	NNSS	U12e.18	Tunnel
461	Discus Thrower ☾	05/27/1966	LANL/DoD	NNSS	U8a	Shaft
1027	Disko Elm	09/14/1989	LLNL/DoD	NNSS	U12p.03	Tunnel
1046	Distant Zenith	09/19/1991	LANL/DoD	NNSS	U12p.04	Tunnel
1054	Divider	09/23/1992	LANL	NNSS	U3ml	Shaft
36	Dixie	04/06/1953	LANL	NNSS	Area 7	Airdrop
809	Dofino	03/08/1977	LLNL	NNSS	U10ba	Shaft
809	Dofino-Lawton	03/08/1977	LLNL	NNSS	U10ba	Shaft
12	Dog (Operation Greenhouse)	04/08/1951	LANL	Enewetak Atoll	----	Tower
19	Dog (Operation Buster)	11/01/1951	LANL	NNSS	Area 7	Airdrop
26	Dog (Operation Tumbler-Snapper)	05/01/1952	LANL	NNSS	Area 7	Airdrop
144	Dogwood	07/05/1958	LLNL	Enewetak Atoll	----	Barge
950	Dolcetto ☾	08/30/1984	LANL	NNSS	U7bi	Shaft
174	Dona Ana	10/16/1958	LANL	NNSS	Area 7	Balloon
513	Door Mist	08/31/1967	LANL/DoD	NNSS	U12g.07	Tunnel
102	Doppler	08/23/1957	LANL	NNSS	Area 7	Balloon
207	Dormouse ☾	01/30/1962	LANL	NNSS	U3aq	Shaft
222	Dormouse Prime ☾	04/05/1962	LANL	NNSS	U3az	Shaft
534	Dorsal Fin	02/29/1968	LANL/DoD	NNSS	U12e.10	Tunnel
465	Double Play	06/15/1966	LLNL/DoD	NNSS	U16a.03	Tunnel

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
14:00:00.04	37.013167	-116.017284	3,968	-394	Safety Experiment	Less than 20 kt	668
11:30:00.00	37.150200	-116.109485	4,469	500	Weapons Related	17 kt	94
15:15:00.16	37.208750	-116.211642	7,346	-1,273	Weapons Effects	Less than 20 kt	841
20:15:00.17	36.879181	-115.935571	3,405	-868	Weapons Effects	Less than 20 kt	686
16:00:00.09	37.211995	-116.207512	7,412	-1,390	Weapons Effects	Less than 20 kt	912
23:20:00.09	37.209621	-116.210960	7,403	-1,326	Weapons Effects	Less than 20 kt	970
14:00:00.04	37.010400	-116.2027643	6,321	-830	Vela Uniform	Less than 20 kt	647
16:30:00.00	37.234140	-116.158224	6,307	-774	Weapons Effects	Less than 20 kt	1050
14:00:00.04	37.011491	-116.204268	6,310	-873	Vela Uniform	Less than 20 kt	672
17:16:00.16	37.214484	-116.184243	7,020	-1,391	Weapons Effects	Less than 20 kt	706
19:15:00.04	37.201239	-116.206094	7,401	-1,319	Weapons Effects	Less than 20 kt	633
16:30:00.04	36.877167	-115.931938	3,385	-794	Weapons Effects	Less than 20 kt	559
19:02:00.16	37.165655	-116.057109	4,285	-1,000	Weapons Related	Less than 20 kt	693
17:00:00.17	37.184978	-116.215970	7,461	-1,284	Weapons Effects	Less than 20 kt	729
17:00:00.04	37.179930	-116.211733	7,540	-1,375	Weapons Effects	Less than 20 kt	622
16:30:00.15	36.818004	-115.956925	3,095	-632	Weapons Effects	Less than 20 kt	419
19:45:00.19	37.187868	-116.214751	7,430	-1,257	Weapons Effects	Less than 20 kt	770
20:00:00.04	37.178340	-116.098631	4,615	-1,106	Weapons Effects	22 kt	461
15:00:00.10	37.235839	-116.163771	6,377	-857	Weapons Effects	Less than 20 kt	1027
16:30:00.07	37.235678	-116.167307	6,392	-865	Weapons Effects	Less than 20 kt	1046
15:04:00.00	37.020632	-115.988778	4,051	-1,115	Weapons Related	Less than 20 kt	1054
15:30:00.00	37.084604	-116.020654	4,025	6,022	Weapons Related	11 kt	36
14:24:00.16	37.176147	-116.053825	4,296	-600	Weapons Related	Less than 20 kt	809
14:24:00.16	37.176147	-116.053825	4,296	-926	Weapons Related	Less than 20 kt	809
18:34:00.00	11.551866	162.347893	10	300	Weapons Related	81 kt	12
15:30:00.00	37.084550	-116.020850	4,193	1,417	Weapons Related	21 kt	19
16:30:00.00	37.084120	-116.021140	4,193	1,040	Weapons Related	19 kt	26
18:30:00.00	11.677570	162.206157	0	12	Weapons Related	397 kt	144
14:45:00.10	37.089748	-116.000235	4,324	-1,198	Weapons Related	Less than 20 kt	950
14:20:00.00	37.086540	-116.024805	4,186	450	Weapons Related	37 tons	174
16:30:00.04	37.177511	-116.209811	7,619	-1,463	Weapons Effects	Less than 20 kt	513
12:00:00.00	37.086540	-116.024805	4,230	1,500	Weapons Related	11 kt	102
18:00:00.13	37.046799	-116.040351	4,026	-1,191	Weapons Related	Low	207
18:00:00.13	37.044458	-116.024402	4,016	-856	Weapons Related	10.6 kt	222
17:08:30.04	37.184571	-116.212312	7,505	-1,345	Weapons Effects	Less than 20 kt	534
17:00:00.04	37.009611	-116.203797	6,499	-1,075	Weapons Effects	Less than 20 kt	465

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
319	Double Tracks	05/15/1963	LANL/DoD/UK	NTTR	----	Surface
439	Dovekie ☹	01/21/1966	LANL	NNSS	U3cd	Shaft
843	Draughts ☹	09/27/1978	LANL	NNSS	U7al	Shaft
392	Drill (Source-Lower) ☹	12/05/1964	LLNL	NNSS	U2ai	Shaft
392	Drill (Target-Upper) ☹	12/05/1964	LLNL	NNSS	U2ai	Shaft
365	Driver	05/07/1964	LLNL	NNSS	U9ar	Shaft
372	Dub ☹	06/30/1964	LLNL	NNSS	U10a	Shaft
370	Duffer ☹	06/18/1964	LLNL	NNSS	U10dS	Shaft
255	Dulce	06/17/1962	LANL	Christmas Island area	----	Airdrop
460	Dumont ☹	05/19/1966	LLNL	NNSS	U2t	Shaft
945	Duoro ☹	06/20/1984	LANL	NNSS	U3lv	Shaft
451	Duryea	04/14/1966	LLNL	NNSS	U20a-1	Shaft
878	Dutchess	10/24/1980	LANL/UK	NNSS	U7bm	Shaft
348	Eagle ☹	12/12/1963	LLNL	NNSS	U9av	Shaft
9	Easy (Operation Ranger)	02/01/1951	LANL	NNSS	Area 5	Airdrop
13	Easy (Operation Greenhouse)	04/21/1951	LANL	Enewetak Atoll	----	Tower
20	Easy (Operation Buster)	11/05/1951	LANL	NNSS	Area 7	Airdrop
27	Easy (Operation Tumbler-Snapper)	05/07/1952	LANL	NNSS	Area 1	Tower
820	Ebbtide ☹	09/15/1977	LANL	NNSS	U3kt	Shaft
771	Edam ☹	04/24/1975	LLNL	NNSS	U2dy	Shaft
160	Eddy	09/19/1958	LANL	NNSS	Area 7	Balloon
242	Eel ☹	05/19/1962	LLNL	NNSS	U9m	Shaft
498	Effendi ☹	04/27/1967	LLNL	NNSS	U2ap	Shaft
954	Egmont	12/09/1984	LLNL/UK	NNSS	U20al	Shaft
139	Elder	06/27/1958	LANL	Enewetak Atoll	----	Barge
741	Elida	12/19/1973	LANL	NNSS	U3hy	Shaft
429	Elkhart ☹	09/17/1965	LLNL	NNSS	U9bs	Shaft
667	Embudo ☹	06/16/1971	LANL	NNSS	U3hd	Shaft
434	Emerson ☹	12/16/1965	LLNL	NNSS	U2al	Shaft
845	Emmenthal	11/02/1978	LLNL	NNSS	U19t	Shaft
239	Encino	05/12/1962	LANL	Christmas Island area	----	Airdrop
40	Encore	05/08/1953	LANL/DoD	NNSS	Area 5	Airdrop
73	Erie	05/30/1956	LANL	Enewetak Atoll	----	Tower
217	Ermine	03/06/1962	LANL	NNSS	U3ab	Shaft
753	Escabosa ☹	07/10/1974	LANL	NNSS	U7ac	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
09:55:00.00	37.706091	-116.988191	4,972	1	Joint US-UK (Storage-Transportation)	Zero	319
18:28:00.04	37.031770	-116.016605	3,991	-1,093	Weapons Related	Less than 20 kt	439
17:00:00.07	37.073820	-116.020703	4,139	-1,449	Weapons Related	20 to 150 kt	843
21:15:00.16	37.134236	-116.070624	4,286	-725	Weapons Related	Less than 20 kt	392
21:15:00.16	37.134236	-116.070624	4,286	-624	Weapons Related	3.4 kt	392
13:00:00.15	37.120213	-116.041167	4,200	-486	Weapons Related	Less than 20 kt	365
13:33:00.14	37.174380	-116.057265	4,293	-848	Plowshare	11.7 kt	372
13:30:00.20	37.165947	-116.039283	4,312	-1,466	Weapons Related	Less than 20 kt	370
16:00:00.00	1.490000	-157.327000	0	9,090	Weapons Related	52 kt	255
13:56:28.14	37.111103	-116.058798	4,195	-2,201	Weapons Related	20 to 200 kt	460
15:15:00.09	37.000331	-116.043928	3,961	-1,250	Weapons Related	20 to 150 kt	945
14:13:43.10	37.242607	-116.431741	6,520	-1,784	Weapons Related	70 kt	451
19:15:00.12	37.074528	-116.000132	4,238	-1,400	Joint US-UK	Less than 20 kt	878
16:02:00.15	37.130971	-116.044749	4,203	-541	Weapons Related	5.3 kt	348
13:47:00.00	36.805100	-115.950200	3,140	1,080	Weapons Related	1 kt	9
18:27:00.00	11.665400	162.233800	10	300	Weapons Related	47 kt	13
16:30:00.00	37.091900	-116.025300	4,224	1,314	Weapons Related	31 kt	20
12:15:00.00	37.053040	-116.103504	4,329	300	Weapons Related	12 kt	27
14:36:30.08	37.032743	-116.044006	4,005	-1,245	Weapons Related	Less than 20 kt	820
14:10:00.17	37.115640	-116.088262	4,263	-1,350	Weapons Related	20 to 200 kt	771
14:00:00.00	37.086540	-116.024805	4,186	500	Weapons Related	83 tons	160
15:00:00.16	37.122589	-116.048079	4,200	-714	Weapons Related	4.5 kt	242
14:45:00.00	37.138735	-116.064073	4,284	-725	Weapons Related	Less than 20 kt	498
19:40:00.09	37.270022	-116.498473	6,124	-1,792	Joint US-UK	20 to 150 kt	954
18:30:00.00	11.677200	162.185255	0	9	Weapons Related	880 kt	139
19:16:00.11	37.001093	-116.032277	3,955	-1,251	Weapons Related	Less than 20 kt	741
15:08:23.10	37.110981	-116.035477	4,245	-723	Weapons Related	Less than 20 kt	429
14:50:00.04	37.033134	-116.014538	3,996	-994	Weapons Related	Less than 20 kt	667
15:39:18.15	37.140792	-116.064050	4,289	-853	Weapons Related	Less than 20 kt	434
15:25:00.17	37.287894	-116.298378	6,991	-1,891	Weapons Related	Less than 20 kt	845
17:02:00.00	1.565000	-157.365000	0	5,510	Weapons Related	500 kt	239
15:30:00.00	36.797923	-115.929776	3,077	2,423	Weapons Effects	27 kt	40
18:15:00.00	11.540100	162.357950	10	300	Weapons Related	14.9 kt	73
16:30:00.13	37.048350	-116.034526	4,028	-240	Safety Experiment	Low	217
16:00:00.09	37.074984	-116.032691	4,102	-2,095	Weapons Related	20 to 200 kt	753

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
789	Esrom ☹	02/04/1976	LLNL	NNSS	U7ak	Shaft
56	ESS	03/23/1955	LANL	NNSS	U10 ESS	Crater
760	Estaca	10/17/1974	LANL	NNSS	U3ja	Shaft
793	Estuary	03/09/1976	LANL	NNSS	U19g	Shaft
188	Evans	10/29/1958	LLNL	NNSS	U12b.04	Tunnel
371	Fade ☹	06/25/1964	LLNL	NNSS	U9be	Shaft
925	Fahada	05/26/1983	LANL	NNSS	U7bh	Shaft
856	Fajy ☹	06/28/1979	LLNL	NNSS	U2fc	Shaft
750	Fallon ☹	05/23/1974	LLNL/UK	NNSS	U2dv	Shaft
827	Farallones ☹	12/14/1977	LLNL	NNSS	U2fa	Shaft
848	Farm	12/16/1978	LLNL	NNSS	U20ab	Shaft
528	Faultless	01/19/1968	LLNL	Central Nevada	----	Shaft
496	Fawn ☹	04/07/1967	LANL	NNSS	U3eo	Shaft
204	Feather	12/22/1961	LLNL	NNSS	U12b.08	Tunnel
452	Fenton ☹	04/23/1966	LLNL	NNSS	U2m1	Shaft
305	Ferret	02/08/1963	LANL	NNSS	U3bf	Shaft
313	Ferret Prime ☹	04/05/1963	LANL	NNSS	U3by	Shaft
154	Fig	08/18/1958	LLNL/DoD	Enewetak Atoll	----	Surface
570	File ☹	10/31/1968	LANL	NNSS	U3gb	Shaft
444	Finfoot ☹	03/07/1966	LANL	NNSS	U3du	Shaft
122	Fir	05/11/1958	LLNL	Bikini Atoll	----	Barge
200	Fisher ☹	12/03/1961	LANL	NNSS	U3ah	Shaft
110	Fizeau	09/14/1957	LANL	NNSS	Area 3	Tower
493	Fizz	03/10/1967	LANL	NNSS	U3fr	Shaft
652	Flask-Green ☹	05/26/1970	LLNL	NNSS	U2az #1	Shaft
652	Flask-Red	05/26/1970	LLNL	NNSS	U2az #3	Shaft
652	Flask-Yellow	05/26/1970	LLNL	NNSS	U2az #2	Shaft
75	Flathead	06/12/1956	LANL	Bikini Atoll	----	Barge
717	Flax-Backup ☹	12/21/1972	LLNL	NNSS	U2dj	Shaft
716	Flax-Source ☹	12/21/1972	LLNL	NNSS	U2dj	Shaft
717	Flax-Test ☹	12/21/1972	LLNL	NNSS	U2dj	Shaft
871	Flora	05/22/1980	LANL	NNSS	U3lg	Shaft
817	Flotost ☹	08/16/1977	LLNL	NNSS	U2ao	Shaft
1044	Floydada	08/15/1991	LANL	NNSS	U7cb	Shaft
628	Fob-Blue	01/23/1970	LLNL	NNSS	U9ITS Y-27	Shaft
628	Fob-Green ☹	01/23/1970	LLNL	NNSS	U9ITS V-27	Shaft
628	Fob-Red ☹	01/23/1970	LLNL	NNSS	U9ITS V-24	Shaft
833	Fondutta	04/11/1978	LLNL/UK	NNSS	U19zS	Shaft
790	Fontina	02/12/1976	LLNL	NNSS	U20f	Shaft
350	Fore ☹	01/16/1964	LLNL	NNSS	U9ao	Shaft

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Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
14:40:00.16	37.106546	-116.038295	4,216	-2,149	Weapons Related	20 to 200 kt	789
20:30:00.00	37.168412	-116.044669	4,288	-67	Weapons Effects	1 kt	56
17:13:00.12	37.006354	-116.015722	3,959	-1,053	Weapons Related	Less than 20 kt	760
14:00:00.09	37.309910	-116.365105	6,734	-2,811	Weapons Related	200 to 500 kt	793
00:00:00.15	37.194804	-116.205604	7,472	-840	Weapons Related	55 tons	188
13:30:00.14	37.111087	-116.029646	4,288	-673	Weapons Related	Less than 20 kt	371
15:00:00.09	37.102858	-116.006568	4,392	-1,261	Weapons Related	Less than 20 kt	925
14:44:00.17	37.143116	-116.088389	4,364	-1,760	Weapons Related	20 to 150 kt	856
13:38:30.16	37.124448	-116.079753	4,274	-1,530	Joint US-UK	20 to 200 kt	750
15:30:00.07	37.135821	-116.086900	4,322	-2,189	Weapons Related	20 to 150 kt	827
15:30:00.16	37.273338	-116.411164	6,581	-2,260	Weapons Related	20 to 150 kt	848
18:15:00.08	38.634221	-116.216221	6,030	-3,200	Weapons Related	200 to 1,000 kt	528
15:00:00.04	37.054329	-116.023095	4,047	-889	Weapons Related	Less than 20 kt	496
16:30:00.13	37.194884	-116.209161	7,443	-812	Weapons Related	150 tons	204
14:55:26.14	37.160491	-116.083743	4,423	-549	Weapons Related	1.4 kt	452
18:30:00.13	37.058292	-116.030132	4,052	-1,069	Weapons Related	Low	305
17:52:00.13	37.037310	-116.024781	4,002	-792	Weapons Related	Low	313
04:00:00.00	11.545500	162.352700	10	2	Weapons Related	20 tons	154
18:30:00.04	37.017048	-116.036598	3,977	-751	Weapons Related	Less than 20 kt	570
18:41:00.07	37.037340	-116.030263	4,004	-642	Weapons Related	Less than 20 kt	444
17:50:00.00	11.697275	165.280000	0	10	Weapons Related	1.36 Mt	122
23:04:59.63	37.045810	-116.028544	4,020	-1,193	Weapons Related	13.4 kt	200
16:45:00.00	37.033430	-116.032243	4,030	500	Weapons Related	11 kt	110
15:00:00.04	37.047313	-116.030635	4,022	-386	Safety Experiment	Less than 20 kt	493
15:00:00.05	37.113320	-116.063205	4,192	-1,734	Plowshare	105 kt	652
15:00:00.05	37.116147	-116.067572	4,220	-500	Plowshare	35 tons	652
15:00:00.05	37.118084	-116.064436	4,220	-1,100	Plowshare	90 tons	652
18:26:00.00	11.688500	165.390000	0	15	Weapons Related	365 kt	75
20:15:24.35	37.139909	-116.084124	4,341	-1,460	Weapons Effects	Less than 20 kt	717
20:15:00.24	37.139909	-116.084124	4,341	-2,260	Weapons Related	Less than 20 kt	716
20:15:24.35	37.139909	-116.084124	4,341	-1,430	Weapons Effects	20 to 200 kt	717
13:00:00.09	37.003016	-116.032261	3,958	-1,100	Weapons Related	Less than 20 kt	871
15:49:00.17	37.146672	-116.063983	4,301	-903	Weapons Related	Less than 20 kt	817
16:00:00.00	37.087287	-116.002657	-1,650	-1,650	Weapons Related	Less than 20 kt	1044
16:30:00.21	37.140633	-116.033512	4,264	-330	Weapons Related	Less than 20 kt	628
16:30:00.21	37.140657	-116.037636	4,242	-802	Weapons Related	Less than 20 kt	628
16:30:00.21	37.137364	-116.037663	4,232	-872	Weapons Related	Less than 20 kt	628
15:30:00.16	37.299575	-116.327584	6,888	-2,077	Joint US-UK	20 to 150 kt	833
14:45:00.16	37.271354	-116.489338	6,117	-3,997	Weapons Related	200 to 1,000 kt	790
16:00:00.15	37.142233	-116.049975	4,231	-1,611	Weapons Related	20 to 200 kt	350

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
813	Forefoot	06/02/1977	LANL	NNSS	U3kf	Shaft
389	Forest	10/31/1964	LLNL	NNSS	U7a	Shaft
11	Fox (Operation Ranger)	02/06/1951	LANL	NNSS	Area 5	Airdrop
28	Fox (Operation Tumbler-Snapper)	05/25/1952	LANL	NNSS	Area 4	Tower
88	Franklin	06/02/1957	LANL	NNSS	Area 3	Tower
104	Franklin Prime	08/30/1957	LANL	NNSS	Area 7	Balloon
853	Freezeout ☹	05/11/1979	LANL	NNSS	U3kw	Shaft
232	Frigate Bird	05/06/1962	LLNL/DoD	Pacific	----	Rocket
680	Frijoles-Deming	09/22/1971	LANL	NNSS	U3jw	Shaft
680	Frijoles-Espuela	09/22/1971	LANL	NNSS	U3ju	Shaft
680	Frijoles-Guaje	09/22/1971	LANL	NNSS	U3hf	Shaft
680	Frijoles-Petaca ☹	09/22/1971	LANL	NNSS	U3hz	Shaft
914	Frisco ☹	09/23/1982	LLNL	NNSS	U8m	Shaft
552	Funnel	06/25/1968	LANL	NNSS	U3ga	Shaft
777	Futtock	06/18/1975	LANL	NNSS	U3eh	Shaft
1052	Galena-Green	06/23/1992	LLNL	NNSS	U9cv	Shaft
1052	Galena-Orange	06/23/1992	LLNL	NNSS	U9cv	Shaft
1052	Galena-Yellow	06/23/1992	LLNL	NNSS	U9cv	Shaft
106	Galileo	09/02/1957	LANL	NNSS	Area 1	Tower
984	Galveston	09/04/1986	LANL	NNSS	U19af	Shaft
192	Ganymede	10/30/1958	LLNL	NNSS	S9g	Surface
388	Garden	10/23/1964	LLNL	NNSS	U9aj	Shaft
524	Gasbuggy	12/10/1967	LLNL	near Farmington, New Mexico	----	Shaft
988	Gascon ☹	11/14/1986	LANL	NNSS	U4t	Shaft
720	Gazook ☹	03/23/1973	LLNL	NNSS	U2do	Shaft
14	George (Operation Greenhouse)	05/09/1951	LANL	Enewetak Atoll	----	Tower
29	George (Operation Tumbler-Snapper)	06/01/1952	LANL	NNSS	Area 3	Tower
312	Gerbil ☹	03/29/1963	LANL	NNSS	U3bp	Shaft
903	Gibne	04/25/1982	LLNL/UK	NNSS	U20ah	Shaft
509	Gibson ☹	08/04/1967	LANL	NNSS	U3ew	Shaft
515	Gilroy	09/15/1967	LANL	NNSS	U3ex	Shaft
975	Glencoe ☹	03/22/1986	LANL	NNSS	U4i	Shaft
201	Gnome	12/10/1961	LLNL	near Carlsbad, New Mexico	----	Shaft
974	Goldstone	12/28/1985	LLNL	NNSS	U20ao	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
17:15:00.10	37.054895	-116.025832	4,047	-635	Weapons Related	Less than 20 kt	813
17:04:58.61	37.107161	-116.033112	4,255	-1,269	Weapons Related	Less than 20 kt	389
13:47:00.00	36.805100	-115.950200	3,140	1,435	Weapons Related	22 kt	11
12:00:00.00	37.095488	-116.103616	4,309	300	Weapons Related	11 kt	28
11:55:00.00	37.095488	-116.103616	4,026	300	Weapons Related	140 tons	88
12:40:00.00	37.086540	-116.024805	4,186	750	Weapons Related	4.7 kt	104
16:00:00.10	36.998135	-116.018604	3,951	-1,100	Weapons Related	Less than 20 kt	853
23:30:00.00	4.833333	-149.416667	0	11,000	Weapons Related	200 to 1,000 kt	232
14:00:00.04	37.021557	-116.017069	3,977	-492	Safety Experiment	Less than 20 kt	680
14:00:00.04	37.022656	-116.017197	3,979	-490	Safety Experiment	Less than 20 kt	680
14:00:00.04	37.024354	-116.016154	3,980	-843	Weapons Related	Less than 20 kt	680
14:00:00.04	37.021901	-116.019772	3,980	-741	Weapons Related	Less than 20 kt	680
17:00:00.09	37.174702	-116.088666	4,507	-1,480	Weapons Related	20 to 150 kt	914
15:30:00.04	37.046302	-116.031075	4,023	-389	Weapons Related	Less than 20 kt	552
11:49:00.09	37.065592	-116.022829	4,094	-612	Safety Experiment	Less than 20 kt	777
15:00:00.07	37.123873	-116.032112	4,251	-1,312	Safety Experiment	Less than 20 kt	1052
15:00:00.07	37.123873	-116.032112	4,251	-1,247	Safety Experiment	Less than 20 kt	1052
15:00:00.07	37.123873	-116.032112	4,251	-951	Weapons Related	Less than 20 kt	1052
12:40:00.00	37.053040	-116.103504	4,250	500	Weapons Related	11 kt	106
16:09:00.06	37.239678	-116.368643	6,710	-1,598	Weapons Related	Less than 20 kt	984
11:00:00.00	37.125587	-116.047855	4,193	0	Safety Experiment	Zero	192
15:00:00.94	37.116986	-116.032018	4,269	-491	Weapons Related	Less than 20 kt	388
19:30:00.14	36.677905	-107.209025	7,204	-4,227	Plowshare	29 kt	524
16:00:00.07	37.100381	-116.048939	4,144	-1,946	Weapons Related	20 to 150 kt	988
20:15:00.17	37.117223	-116.087903	4,268	-1,070	Weapons Related	Less than 20 kt	720
21:30:00.00	11.624300	162.303900	10	200	Weapons Related	225 kt	14
11:55:00.00	37.095488	-116.103616	4,028	300	Weapons Related	15 kt	29
15:49:00.12	37.041675	-116.019265	4,012	-917	Weapons Related	Low	312
18:05:00.09	37.255785	-116.423251	6,445	-1,869	Joint US-UK	20 to 150 kt	903
14:00:00.04	37.024338	-116.013239	3,980	-790	Weapons Related	Less than 20 kt	509
17:30:00.04	37.034822	-116.021715	3,998	-789	Weapons Related	Less than 20 kt	515
16:15:00.08	37.082957	-116.066908	4,136	-2,000	Weapons Related	29 kt	975
19:00:00.00	32.263160	-103.866460	3,400	-1,184	Plowshare	3 kt	201
19:01:00.09	37.237751	-116.473638	6,279	-1,800	Weapons Related	20 to 150 kt	974

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
937	Gorbea	01/31/1984	LLNL	NNSS	U2cq	Shaft
801	Gouda	10/06/1976	LLNL	NNSS	U2ef	Shaft
594	Gourd-Amber ☹	04/24/1969	LLNL	NNSS	U2bf	Shaft
594	Gourd-Brown ☹	04/24/1969	LLNL	NNSS	U2bl	Shaft
42	Grable	05/25/1953	LANL	NNSS	Area 5	Airburst
625	Grape A ☹	12/17/1969	LANL	NNSS	U7s	Shaft
630	Grape B ☹	02/04/1970	LANL	NNSS	U7v	Shaft
483	Greeley ☹	12/20/1966	LLNL	NNSS	U20g	Shaft
346	Greys ☹	11/22/1963	LLNL	NNSS	U9ax	Shaft
749	Grove ☹	05/22/1974	LLNL	NNSS	U2ds	Shaft
339	Grunion ☹	10/11/1963	LANL	NNSS	U3bz	Shaft
816	Gruyere	08/16/1977	LLNL	NNSS	U9cg	Shaft
816	Gruyere-Gradino	08/16/1977	LLNL	NNSS	U9cg	Shaft
381	Guanay ☹	09/04/1964	LANL	NNSS	U3di	Shaft
409	Gum Drop	04/21/1965	LLNL/DoD	NNSS	U16a.02	Tunnel
296	Gundi ☹	11/15/1962	LANL	NNSS	U3bm	Shaft
318	Gundi Prime ☹	05/09/1963	LANL	NNSS	U3db	Shaft
59	HA	04/06/1955	LANL	NNSS	Area 1	Airdrop
380	Haddock	08/28/1964	LANL	NNSS	U3dl	Shaft
468	Halfbeak	06/30/1966	LANL	NNSS	U19b	Shaft
172	Hamilton	10/15/1958	LLNL/DoD	NNSS	Area 5	Tower
390	Handcar	11/05/1964	LLNL	NNSS	U10b	Shaft
358	Handicap ☹	03/12/1964	LLNL	NNSS	U9ba	Shaft
640	Handley	03/26/1970	LLNL	NNSS	U20m	Shaft
705	Haplopappus	06/28/1972	LLNL	NNSS	U9ITS W-22	Shaft
210	Hard Hat	02/15/1962	LANL/DoD/ SNL	NNSS	U15a	Shaft
995	Hardin	04/30/1987	LLNL	NNSS	U20av	Shaft
670	Harebell ☹	06/24/1971	LLNL	NNSS	U2br	Shaft
320	Harkee ☹	05/17/1963	LANL	NNSS	U3bv	Shaft
252	Harlem	06/12/1962	LLNL	Christmas Island area	- - - -	Airdrop
1014	Harlingen-A ☹	08/23/1988	LANL	NNSS	U6g	Shaft
1014	Harlingen-B	08/23/1988	LANL	NNSS	U6h	Shaft
41	Harry	05/19/1953	LANL	NNSS	Area 3	Tower
887	Harzer	06/06/1981	LLNL	NNSS	U19aj	Shaft
545	Hatchet ☹	05/03/1968	LANL	NNSS	U3fz	Shaft
304	Hatchie	02/08/1963	LLNL	NNSS	U9e	Shaft
890	Havarti ☹	08/05/1981	LLNL	NNSS	U10bg	Shaft
260	Haymaker ☹	06/27/1962	LANL	NNSS	U3auS	Shaft
990	Hazebrook-Apricot (Orange)	02/03/1987	LLNL	NNSS	U10bh	Shaft
990	Hazebrook-Checkerberry (Red)	02/03/1987	LLNL	NNSS	U10bh	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
15:30:00.08	37.112649	-116.122575	4,499	-1,273	Weapons Related	20 to 150 kt	937
14:30:00.16	37.134514	-116.063146	4,260	-656	Weapons Related	Less than 20 kt	801
13:04:00.14	37.163922	-116.080512	4,418	-595	Weapons Related	Less than 20 kt	594
13:04:00.14	37.159915	-116.081744	4,409	-744	Weapons Related	Less than 20 kt	594
15:30:00.00	36.797923	-115.929776	3,077	524	Weapons Related	15 kt	42
15:00:00.04	37.083333	-116.002451	4,268	-1,807	Weapons Related	20 to 200 kt	625
17:00:00.04	37.098028	-116.027355	4,253	-1,819	Weapons Related	20 to 200 kt	630
15:30:00.08	37.302021	-116.409182	6,470	-3,991	Weapons Related	870 kt	483
17:30:00.15	37.119274	-116.046042	4,182	-988	Weapons Related	Intermediate	346
14:15:00.17	37.114758	-116.075575	4,236	-1,031	Weapons Related	Less than 20 kt	749
14:00:00.11	37.037296	-116.022040	4,002	-857	Weapons Related	Low	339
14:41:00.16	37.145117	-116.049948	4,232	-680	Weapons Related	Less than 20 kt	816
14:41:00.16	37.145117	-116.049948	4,232	-1,050	Weapons Related	Less than 20 kt	816
18:15:00.08	37.017527	-116.023574	3,975	-856	Weapons Related	Less than 20 kt	381
22:00:00.03	37.007111	-116.202949	6,425	-1,000	Weapons Effects	Less than 20 kt	409
16:30:00.08	37.041705	-116.024740	4,010	-792	Weapons Related	Low	296
18:19:00.00	37.049351	-116.016455	4,043	-892	Weapons Related	Low	318
18:00:00.00	37.028664	-116.058714	4,038	40,000	Weapons Effects	3 kt	59
17:06:00.04	37.066970	-116.023153	4,097	-1,193	Weapons Related	Less than 20 kt	380
22:15:00.07	37.315753	-116.299858	6,792	-2,688	Weapons Related	365 kt	468
16:00:00.00	36.802261	-115.933075	3,080	50	Weapons Related	1.2 tons	172
15:00:00.11	37.174324	-116.067903	4,375	-1,322	Plowshare	12 kt	390
15:00:00.01	37.129888	-116.037207	4,225	-471	Weapons Related	Less than 20 kt	358
19:00:00.20	37.300424	-116.535014	5,903	-3,967	Weapons Related	More than 1 Mt	640
16:30:03.16	37.135156	-116.036134	4,237	-605	Weapons Related	Less than 20 kt	705
18:00:00.10	37.226214	-116.060187	5,114	-943	Weapons Effects	5.7 kt	210
13:30:00.09	37.232994	-116.424011	6,464	-2,051	Weapons Related	20 to 150 kt	995
14:00:00.16	37.146647	-116.067709	4,312	-1,702	Weapons Related	20 to 200 kt	670
14:55:00.00	37.043860	-116.016502	4,022	-792	Weapons Related	Low	320
15:37:00.00	1.470000	-157.195000	0	13,645	Weapons Related	1.2 Mt	252
18:30:00.08	36.991132	-116.018872	3,945	-950	Weapons Related	Less than 20 kt	1014
18:30:00.08	36.988660	-116.018890	3,943	-950	Weapons Related	Less than 20 kt	1014
12:05:00.00	37.040342	-116.026241	4,006	300	Weapons Related	32 kt	41
18:00:00.08	37.303343	-116.326480	6,891	-2,090	Weapons Related	20 to 150 kt	887
16:00:00.04	37.028499	-116.020744	3,987	-789	Weapons Related	Less than 20 kt	545
16:00:01.15	37.125912	-116.039518	4,208	-200	Weapons Related	Low	304
13:41:00.09	37.153695	-116.035946	4,298	-656	Weapons Related	Less than 20 kt	890
18:00:00.12	37.041549	-116.036114	4,014	-1,340	Weapons Related	67 kt	260
15:20:00.08	37.181096	-116.049312	4,322	-860	Safety Experiment	Less than 20 kt	990
15:20:00.08	37.181096	-116.049312	4,322	-740	Weapons Related	Less than 20 kt	990

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
990	Hazebrook-Emerald (Green)	02/03/1987	LLNL	NNSS	U10bh	Shaft
860	Hearts ☹	09/06/1979	LANL	NNSS	U4n	Shaft
495	Heilman	04/06/1967	LLNL	NNSS	U2cg	Shaft
959	Hermosa	04/02/1985	LANL	NNSS	U7bs	Shaft
141	Hickory	06/29/1958	LLNL	Bikini Atoll	----	Barge
166	Hidalgo	10/05/1958	LANL	NNSS	Area 7	Balloon
645	Hod-A (Green) ☹	05/01/1970	LLNL	NNSS	U9ITS X-23	Shaft
645	Hod-B (Red) ☹	05/01/1970	LLNL	NNSS	U9ITS X-20	Shaft
644	Hod-C (Blue)	05/01/1970	LLNL	NNSS	U9ITS Z-25	Shaft
219	Hognose ☹	03/15/1962	LANL	NNSS	U3ai	Shaft
126	Holly	05/20/1958	LANL	Enewetak Atoll	----	Barge
93	Hood	07/05/1957	LLNL	NNSS	Area 9	Balloon
360	Hook ☹	04/14/1964	LLNL	NNSS	U9bc	Shaft
394	Hoopoe	12/16/1964	LANL	NNSS	U3cf	Shaft
220	Hoosic ☹	03/28/1962	LLNL	NNSS	U9j	Shaft
606	Horehound	08/27/1969	LANL	NNSS	U3gm	Shaft
54	Hornet	03/12/1955	LANL	NNSS	Area 3	Tower
1028	Hornitos	10/31/1989	LLNL	NNSS	U20bc	Shaft
689	Hospah ☹	12/14/1971	LANL	NNSS	U3je	Shaft
901	Hosta	02/12/1982	LANL	NNSS	U19ak	Shaft
292	Housatonic	10/30/1962	LLNL	Johnston Island area	----	Airdrop
1040	Houston	11/14/1990	LANL/UK	NNSS	U19az	Shaft
30	How	06/05/1952	LANL	NNSS	Area 2	Tower
1045	Hoya	09/14/1991	LLNL	NNSS	U20be	Shaft
224	Hudson ☹	04/12/1962	LLNL	NNSS	U9n	Shaft
651	Hudson Moon	05/26/1970	LLNL/DoD	NNSS	U12e.12	Tunnel
564	Hudson Seal	09/24/1968	LLNL/DoD	NNSS	U12n.04	Tunnel
568	Hula ☹	10/29/1968	LLNL	NNSS	U9bu	Shaft
744	Hulsea	03/14/1974	LLNL	NNSS	U2bx	Shaft
190	Humboldt	10/29/1958	LLNL/DoD	NNSS	Area 3	Tower
1053	Hunters Trophy	09/18/1992	LLNL/DoD	NNSS	U12n.24	Tunnel
526	Hupmobile ☹	01/18/1968	LLNL	NNSS	U2y	Shaft
85	Huron	07/21/1956	LANL	Enewetak Atoll	----	Barge
873	Huron King ☹	06/24/1980	LANL/DoD	NNSS	U3ky	Shaft
913	Huron Landing	09/23/1982	LANL/DoD	NNSS	U12n.15	Tunnel
736	Husky Ace	10/12/1973	LANL/DoD	NNSS	U12n.07	Tunnel
781	Husky Pup	10/24/1975	LLNL/DoD	NNSS	U12t.03	Tunnel
604	Hutch ☹	07/16/1969	LLNL	NNSS	U2df	Shaft
327	Hutia ☹	06/06/1963	LANL	NNSS	U3bc	Shaft
761	Hybla Fair	10/28/1974	LLNL/DoD	NNSS	U12n.09	Tunnel

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
15:20:00.08	37.181096	-116.049312	4,322	-610	Weapons Related	Less than 20 kt	990
15:00:00.09	37.088064	-116.053654	4,130	-2,100	Weapons Related	140 kt	860
15:00:00.12	37.137276	-116.133552	4,699	-501	Weapons Related	Less than 20 kt	495
20:00:00.09	37.094763	-116.033212	4,192	-2,094	Weapons Related	20 to 150 kt	959
24:00:00.00	11.503000	165.374000	0	12	Weapons Related	14 kt	141
14:10:00.00	37.086540	-116.024805	4,186	377	Safety Experiment	77 tons	166
14:40:00.17	37.136251	-116.034924	4,248	-790	Weapons Related	Less than 20 kt	645
14:40:00.17	37.132952	-116.034948	4,242	-870	Weapons Related	Less than 20 kt	645
14:25:00.00	37.138431	-116.032162	4,273	-330	Safety Experiment	Less than 20 kt	644
16:30:00.13	37.043914	-116.031904	4,019	-788	Weapons Related	Low	219
18:30:00.00	11.537300	162.347400	0	13	Weapons Related	5.9 kt	126
11:40:00.00	37.134742	-116.041648	4,230	1,500	Weapons Related	74 kt	93
14:40:00.15	37.128878	-116.030698	4,274	-670	Weapons Related	Less than 20 kt	360
20:00:00.07	37.048378	-116.034098	4,026	-231	Safety Experiment	Less than 20 kt	394
18:00:00.16	37.124271	-116.034746	4,235	-614	Weapons Related	3.4 kt	220
13:45:00.04	36.992656	-115.996396	3,942	-1,089	Weapons Related	Less than 20 kt	606
13:20:00.00	37.040342	-116.026241	4,007	300	Weapons Related	4 kt	54
15:30:00.09	37.263049	-116.491615	6,146	-1,850	Weapons Related	20 to 150 kt	1028
21:10:01.04	37.025802	-116.030016	3,987	-991	Weapons Related	Less than 20 kt	689
15:25:00.09	37.347921	-116.316986	6,898	-2,098	Weapons Related	20 to 150 kt	901
16:01:00.00	13.613333	-172.216667	0	12,130	Weapons Related	8.3 Mt	292
19:17:00.07	37.227365	-116.372127	6,753	-1,950	Joint US-UK	20 to 150 kt	1040
11:55:00.00	37.138372	-116.118258	4,492	300	Weapons Related	14 kt	30
19:00:00.08	37.225586	-116.429019	6,493	-2,159	Weapons Related	20 to 150 kt	1045
18:00:00.16	37.127131	-116.045737	4,200	-495	Weapons Related	Low	224
14:16:00.17	37.182560	-116.214271	7,550	-1,386	Weapons Effects	Less than 20 kt	651
17:05:01.09	37.204715	-116.207275	7,200	-1,130	Weapons Effects	Less than 20 kt	564
15:36:08.60	37.113212	-116.041804	4,202	-651	Weapons Related	Less than 20 kt	568
17:00:00.17	37.155082	-116.064966	4,319	-640	Weapons Related	Less than 20 kt	744
14:45:00.00	37.047565	-116.025425	4,029	25	Weapons Related	7.8 tons	190
17:00:00.08	37.206877	-116.210853	7,346	-1,264	Weapons Effects	Less than 20 kt	1053
16:30:00.13	37.145534	-116.066548	4,310	-810	Weapons Effects	7.4 kt	526
18:16:00.00	11.677817	162.204974	0	15	Weapons Related	250 kt	85
15:10:00.07	37.023247	-116.035005	3,985	-1,050	Weapons Effects	Less than 20 kt	873
16:00:00.09	37.211973	-116.207639	7,417	-1,339	Weapons Effects	Less than 20 kt	913
17:00:00.08	37.200338	-116.204063	7,430	-1,364	Weapons Effects	Less than 20 kt	736
17:11:26.09	37.221588	-116.180561	6,769	-1,076	Weapons Effects	Less than 20 kt	781
14:55:00.04	37.139465	-116.088314	4,354	-1,798	Weapons Related	20 to 200 kt	604
14:00:00.13	37.044236	-116.037230	4,019	-442	Weapons Related	Low	327
15:00:00.17	37.201085	-116.204811	7,394	-1,325	Weapons Effects	Less than 20 kt	761

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
823	Hybla Gold	11/01/1977	LANL/DoD	NNSS	U12e.20	Tunnel
277	Hyrax ☹	09/14/1962	LANL	NNSS	U3bh	Shaft
832	Iceberg ☹	03/23/1978	LANL	NNSS	U4g	Shaft
603	Ildrim ☹	07/16/1969	LLNL	NNSS	U2au	Shaft
557	Imp ☹	08/09/1968	LLNL	NNSS	U2bj	Shaft
79	Inca	06/21/1956	LLNL	Enewetak Atoll	- - - -	Tower
1022	Ingot	03/09/1989	LLNL	NNSS	U2gg	Shaft
784	Inlet	11/20/1975	LANL	NNSS	U19f	Shaft
599	Ipecac-A	05/27/1969	LANL	NNSS	U3hk-a	Shaft
599	Ipecac-B	05/27/1969	LANL	NNSS	U3hk-b	Shaft
891	Islay ☹	08/27/1981	LLNL	NNSS	U2er	Shaft
15	Item	05/25/1951	LANL	Enewetak Atoll	- - - -	Tower
421	Izzer ☹	07/16/1965	LLNL	NNSS	U9bp	Shaft
837	Jackpots	06/01/1978	LANL	NNSS	U3kj	Shaft
638	Jal ☹	03/19/1970	LANL	NNSS	U3hh	Shaft
751	Jara ☹	06/06/1974	LANL	NNSS	U3hp	Shaft
929	Jarlsberg ☹	08/27/1983	LLNL	NNSS	U10ca	Shaft
978	Jefferson	04/22/1986	LLNL	NNSS	U20ai	Shaft
310	Jerboa ☹	03/01/1963	LANL	NNSS	U3at	Shaft
748	Jib	05/08/1974	LANL	NNSS	U3hb	Shaft
697	Jicarilla	04/19/1972	LANL	NNSS	U3jm	Shaft
95	John	07/19/1957	LANL/DoD	NNSS	Area 10	Rocket
269	Johnnie Boy	07/11/1962	LLNL/DoD	NNSS	U18j2	Crater
899	Jornada ☹	01/28/1982	LANL	NNSS	U4j	Shaft
610	Jorum	09/16/1969	LLNL	NNSS	U20e	Shaft
1049	Junction	03/26/1992	LANL	NNSS	U19bg	Shaft
148	Juniper	07/22/1958	LLNL	Bikini Atoll	- - - -	Barge
183	Juno	10/24/1958	LLNL	NNSS	S9f	Surface
466	Kankakee ☹	06/15/1966	LLNL	NNSS	U10p	Shaft
947	Kappeli	07/25/1984	LLNL	NNSS	U20am	Shaft
699	Kara	05/11/1972	LLNL	NNSS	U2dh #3	Shaft
830	Karab ☹	03/16/1978	LLNL	NNSS	U4ah	Shaft
872	Kash	06/12/1980	LLNL	NNSS	U20af	Shaft
728	Kashan ☹	05/24/1973	LLNL	NNSS	U10av	Shaft
782	Kasseri	10/28/1975	LLNL	NNSS	U20z	Shaft
308	Kaweah ☹	02/21/1963	LLNL	NNSS	U9ab	Shaft
1018	Kawich A-Blue	12/09/1988	LLNL	NNSS	U8n	Shaft
1018	Kawich A-White	12/09/1988	LLNL	NNSS	U8n	Shaft
1021	Kawich-Black ☹	02/24/1989	LLNL	NNSS	U2cu	Shaft
1021	Kawich-Red ☹	02/24/1989	LLNL	NNSS	U2cu	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
18:06:00.07	37.187733	-116.213832	7,434	-1,263	Weapons Effects	Less than 20 kt	823
17:10:00.12	37.043888	-116.021981	4,017	-711	Weapons Related	Low	277
16:30:00.20	37.101729	-116.052018	4,152	-2,101	Weapons Related	20 to 150 kt	832
13:02:30.04	37.119384	-116.055988	4,209	-1,346	Weapons Related	20 to 200 kt	603
13:00:00.00	37.161740	-116.078057	4,399	-586	Weapons Related	Less than 20 kt	557
21:56:00.00	11.629300	162.285000	10	200	Weapons Related	15.2 kt	79
14:05:00.09	37.142791	-116.067808	4,289	-1,640	Weapons Related	20 to 150 kt	1022
15:00:00.09	37.224903	-116.368447	6,734	-2,685	Weapons Related	200 to 1,000 kt	784
14:00:00.04	37.014942	-116.003044	3,965	-407	Safety Experiment	Less than 20 kt	699
14:00:00.04	37.014793	-116.000993	3,968	-408	Safety Experiment	Less than 20 kt	599
14:31:00.09	37.160368	-116.067395	4,342	-965	Weapons Related	Less than 20 kt	891
18:17:00.00	11.669300	162.241500	10	200	Weapons Related	45.5 kt	15
13:04:24.10	37.114951	-116.033044	4,264	-537	Weapons Related	Less than 20 kt	421
17:00:00.08	37.020598	-116.032814	3,979	-998	Weapons Related	Less than 20 kt	837
14:03:30.34	37.001047	-116.023716	3,955	-989	Weapons Related	Less than 20 kt	638
14:40:00.08	37.003797	-116.024378	3,960	-1,240	Weapons Related	Less than 20 kt	751
14:00:00.09	37.192891	-116.034909	4,411	-655	Weapons Related	Less than 20 kt	929
14:30:00.09	37.264063	-116.441091	6,503	-1,992	Weapons Related	20 to 150 kt	978
19:00:00.12	37.044463	-116.027363	4,016	-988	Weapons Related	Low	310
16:55:00.09	37.000933	-116.002487	3,951	-592	Weapons Related	Less than 20 kt	748
16:42:00.05	37.006567	-116.017474	3,960	-486	Weapons Related	Less than 20 kt	697
14:00:00.00	37.160350	-116.053805	4,280	14,830	Weapons Effects	About 2 kt	95
16:45:00.09	37.112150	-116.333947	5,066	-23	Weapons Effects	500 tons	269
16:00:00.10	37.091295	-116.052102	4,134	-2,096	Weapons Related	139 kt	899
14:30:00.04	37.314092	-116.461577	6,316	-3,802	Weapons Related	Less than 1 Mt	610
16:30:00.00	37.272398	-116.360660	6,694	-2,041	Weapons Related	20 to 150 kt	1049
04:20:00.00	11.503000	165.374000	0	12	Weapons Related	65 kt	148
16:01:00.00	37.123250	-116.038650	4,210	0	Safety Experiment	1.7 tons	183
18:02:47.13	37.171487	-116.049744	4,292	-1,492	Weapons Related	20 to 200 kt	466
15:30:00.08	37.267711	-116.411530	6,593	-2,100	Weapons Related	20 to 150 kt	947
14:00:00.16	37.112445	-116.085367	4,247	-850	Weapons Related	Less than 20 kt	699
15:00:00.07	37.085125	-116.082490	4,182	-1,086	Weapons Related	Less than 20 kt	830
17:15:00.09	37.281604	-116.454743	6,360	-2,116	Weapons Related	20 to 150 kt	872
13:30:00.16	37.162182	-116.056845	4,278	-870	Weapons Related	Less than 20 kt	728
14:30:00.16	37.289997	-116.412434	6,509	-4,150	Weapons Related	200 to 1,000 kt	782
19:47:00.14	37.120269	-116.046582	4,187	-745	Plowshare	3 kt	308
15:15:00.08	37.175270	-116.092609	4,542	-1,260	Safety Experiment	Less than 20 kt	1018
15:15:00.08	37.175270	-116.092609	4,542	1,210	Safety Experiment	Less than 20 kt	1018
16:15:00.08	37.128444	-116.122829	4,526	-1,415	Safety Experiment	Less than 20 kt	1021
16:15:00.08	37.128444	-116.122829	4,526	-1,215	Weapons Related	Less than 20 kt	1021

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
1013	Kearsarge	08/17/1988	LLNL	NNSS	U19ax	Shaft
764	Keel ☹	12/16/1974	LANL	NNSS	U3hu	Shaft
788	Keelson ☹	02/04/1976	LANL	NNSS	U7ai	Shaft
331	Kennebec ☹	06/25/1963	LLNL	NNSS	U2af	Shaft
96	Kepler	07/24/1957	LANL	NNSS	Area 4	Tower
432	Kermet ☹	11/23/1965	LLNL	NNSS	U2c	Shaft
1005	Kernville	02/15/1988	LLNL	NNSS	U20ar	Shaft
906	Kesti	06/16/1982	LLNL	NNSS	U9cn	Shaft
407	Kestrel ☹	04/05/1965	LANL	NNSS	U3dd	Shaft
475	Khaki	10/15/1966	LANL	NNSS	U3et	Shaft
77	Kickapoo	06/13/1956	LLNL	Enewetak Atoll	----	Tower
32	King	11/16/1952	LANL	Enewetak Atoll	----	Airdrop
293	Kingfish	11/01/1962	LANL/DoD	Johnston Island area	----	Rocket
973	Kinibito ☹	12/05/1985	LANL/UK	NNSS	U3me	Shaft
357	Klickitat ☹	02/20/1964	LLNL	NNSS	U10e	Shaft
851	Kloster ☹	02/15/1979	LLNL	NNSS	U2eo	Shaft
503	Knickerbocker	05/26/1967	LLNL	NNSS	U20d	Shaft
562	Knife A	09/12/1968	LANL	NNSS	U3fb	Shaft
574	Knife B ☹	11/15/1968	LANL	NNSS	U3dz	Shaft
566	Knife C ☹	10/03/1968	LANL	NNSS	U3er	Shaft
533	Knox ☹	02/21/1968	LLNL	NNSS	U2at	Shaft
124	Koa	05/12/1958	LANL	Enewetak Atoll	----	Surface
334	Kohocton	08/23/1963	LLNL	NNSS	U9ak	Shaft
46	Koon	04/06/1954	LLNL	Bikini Atoll	----	Surface
316	Kootanai ☹	04/24/1963	LLNL	NNSS	U9w	Shaft
904	Kryddost	05/06/1982	LLNL	NNSS	U2co	Shaft
611	Kyack-A ☹	09/20/1969	LLNL	NNSS	U2bq1	Shaft
611	Kyack-B ☹	09/20/1969	LLNL	NNSS	U2bq2	Shaft
927	Laban ☹	08/03/1983	LLNL	NNSS	U2ff	Shaft
632	Labis	02/05/1970	LLNL	NNSS	U10an	Shaft
986	Labquark	09/30/1986	LLNL	NNSS	U19an	Shaft
69	Lacrosse	05/04/1956	LANL	Enewetak Atoll	----	Surface
684	Lagoon ☹	10/14/1971	LLNL	NNSS	U10ar	Shaft
669	Laguna ☹	06/23/1971	LANL	NNSS	U3fd	Shaft
437	Lampblack	01/18/1966	LANL	NNSS	U7i	Shaft
518	Lanpher ☹	10/18/1967	LLNL	NNSS	U2x	Shaft
109	Laplace	09/08/1957	LANL	NNSS	Area 7	Balloon
1008	Laredo ☹	05/21/1988	LANL	NNSS	U3mh	Shaft
89	Lassen	06/05/1957	LLNL	NNSS	Area 9	Balloon
743	Latir ☹	02/27/1974	LANL	NNSS	U4d	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
17:00:00.09	37.297104	-116.307420	6,986	-2,020	Weapons Related	100 to 150 kt	1013
17:30:00.09	37.011253	-116.018496	3,966	-1,000	Weapons Related	Less than 20 kt	764
14:20:00.11	37.069209	-116.031028	4,084	-2,098	Weapons Related	20 to 200 kt	788
23:00:00.15	37.131351	-116.068934	4,275	-742	Weapons Related	Low	331
11:50:00.00	37.095488	-116.103616	4,309	500	Weapons Related	10 kt	96
18:17:32.10	37.161846	-116.071790	4,368	-644	Weapons Related	Less than 20 kt	432
18:10:00.09	37.314382	-116.472374	6,319	-1,777	Weapons Related	20 to 150 kt	1005
14:00:00.08	37.114180	-116.017448	4,391	-945	Weapons Related	Less than 20 kt	906
21:00:00.04	37.025767	-116.023511	3,985	-1,466	Weapons Related	Less than 20 kt	407
19:00:00.05	37.047027	-116.017846	4,031	-763	Weapons Related	Less than 20 kt	475
23:26:00.00	11.623857	162.318780	10	300	Weapons Related	1.49 kt	77
23:30:00.00	11.558800	162.345400	0	1,480	Weapons Related	500 kt	32
12:10:00.00	16.113503	-169.680561	0	tens of miles	Weapons Effects	Submegaton	293
15:00:00.07	37.053219	-116.046237	4,052	-1,901	Joint US-UK	20 to 150 kt	973
15:30:00.15	37.150838	-116.040983	4,266	-1,613	Plowshare	70 kt	357
18:05:00.16	37.151962	-116.072708	4,344	-1,760	Weapons Related	20 to 150 kt	851
15:00:01.50	37.247887	-116.481068	6,252	-2,075	Weapons Related	76 kt	503
14:00:00.04	37.031750	-116.012497	3,994	-1,089	Weapons Related	Less than 20 kt	562
15:45:00.04	37.026099	-116.034128	3,987	-1,191	Weapons Related	Less than 20 kt	574
14:29:00.04	37.025877	-115.993703	4,030	-989	Weapons Related	Less than 20 kt	566
15:30:00.00	37.116509	-116.054567	4,199	-2,116	Weapons Related	20 to 200 kt	533
18:30:00.00	11.670990	162.198652	5	3	Weapons Related	1.37 Mt	124
13:20:00.15	37.124914	-116.036257	4,267	-836	Weapons Related	Low	334
18:20:00.00	11.503166	165.369450	10	14	Weapons Related	110 kt	46
16:09:30.14	37.120549	-116.037147	4,225	-597	Weapons Related	Low	316
20:00:00.08	37.116792	-116.127779	4,562	-1,100	Weapons Related	Less than 20 kt	904
14:30:00.04	37.158699	-116.068599	4,342	-630	Weapons Related	Less than 20 kt	611
14:30:00.04	37.157372	-116.067041	4,331	-610	Weapons Related	Less than 20 kt	611
13:33:00.10	37.118948	-116.089777	4,275	-1,070	Weapons Related	Less than 20 kt	927
15:00:00.04	37.163914	-116.039702	4,308	-1,450	Weapons Related	25 kt	632
22:30:00.10	37.300029	-116.308310	6,978	-2,020	Weapons Related	20 to 150 kt	986
18:25:00.00	11.553878	162.348050	17	0	Weapons Related	40 kt	69
14:30:00.16	37.179733	-116.053961	4,307	-1,000	Weapons Related	Less than 20 kt	684
15:30:00.04	37.021919	-116.023540	3,981	-1,493	Weapons Related	20 to 200 kt	669
18:35:00.04	37.091654	-116.019550	4,246	-1,842	Weapons Related	20 to 200 kt	437
14:30:00.08	37.115537	-116.058505	4,206	-2,346	Weapons Related	20 to 200 kt	518
13:00:00.00	37.086540	-116.024805	4,186	750	Weapons Related	1 kt	109
22:30:00.14	37.032437	-115.988170	4,092	-1,153	Weapons Related	Less than 150 kt	1008
11:45:00.00	37.134742	-116.041648	4,230	500	Weapons Related	0.5 tons	89
17:00:00.09	37.104210	-116.053709	4,167	-2,102	Weapons Related	20 to 200 kt	743

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
170	Lea	10/13/1958	LANL	NNSS	Area 7	Balloon
1038	Ledoux	09/27/1990	LANL	NNSS	U1a.01	Shaft
512	Lexington ☹	08/24/1967	LLNL	NNSS	U2bm	Shaft
785	Leyden	11/26/1975	LLNL	NNSS	U9cm	Shaft
448	Lime	04/01/1966	LANL	NNSS	U7j	Shaft
137	Linden	06/18/1958	LANL	Enewetak Atoll	----	Barge
375	Links	07/23/1964	LLNL	NNSS	U9bf	Shaft
867	Liptauer ☹	04/03/1980	LLNL	NNSS	U2eh	Shaft
272	Little Feller I	07/17/1962	SNL/DoD	NNSS	Area 18	Surface
265	Little Feller II	07/07/1962	SNL/DoD	NNSS	Area 18	Surface
1001	Lockney	09/24/1987	LANL	NNSS	U19aq	Shaft
173	Logan	10/16/1958	LLNL	NNSS	U12e.02	Tunnel
430	Long Shot	10/29/1965	LANL/DoD	Amchitka, Alaska	----	Shaft
696	Longchamps ☹	04/19/1972	LLNL	NNSS	U2dm	Shaft
626	Lovage ☹	12/17/1969	LANL	NNSS	U3fe	Shaft
839	Lowball ☹	07/12/1978	LANL	NNSS	U7av	Shaft
1047	Lubbock ☹	10/18/1991	LANL	NNSS	U3mt	Shaft
161	Luna	09/21/1958	LANL	NNSS	U3m	Shaft
356	Mackerel	02/18/1964	LANL	NNSS	U4b	Shaft
202	Mad	12/13/1961	LLNL	NNSS	U9a	Shaft
300	Madison	12/12/1962	LLNL	NNSS	U12g.01	Tunnel
129	Magnolia	05/26/1958	LANL	Enewetak Atoll	----	Barge
531	Mallet ☹	01/31/1968	LANL	NNSS	U3fv	Shaft
302	Manatee	12/14/1962	LLNL	NNSS	U9af	Shaft
917	Manteca ☹	12/10/1982	LLNL	NNSS	U4al	Shaft
649	Manzanas	05/21/1970	LANL	NNSS	U3gr	Shaft
134	Maple	06/10/1958	LLNL	Bikini Atoll	----	Barge
964	Maribo	06/26/1985	LLNL	NNSS	U2cs	Shaft
164	Mars	09/28/1958	LLNL	NNSS	U12f.02	Tunnel
780	Marsh ☹	09/06/1975	LANL	NNSS	U3kb	Shaft
261	Marshmallow	06/28/1962	LLNL/DoD	NNSS	U16a	Tunnel
810	Marsilly ☹	04/05/1977	LLNL	NNSS	U2el	Shaft
516	Marvel ☹	09/21/1967	LLNL	NNSS	U10dS1	Shaft
778	Mast	06/19/1975	LANL	NNSS	U19u	Shaft
330	Mataco ☹	06/14/1963	LANL	NNSS	U3bk	Shaft
424	Mauve ☹	08/06/1965	LANL	NNSS	U3dp	Shaft
436	Maxwell	01/13/1966	LLNL	NNSS	U9br	Shaft
189	Mazama	10/29/1958	LLNL	NNSS	Area 9	Tower
852	Memory ☹	03/14/1979	LANL	NNSS	U3kq	Shaft
162	Mercury	09/23/1958	LLNL	NNSS	U12f.01	Tunnel

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
13:20:00.00	37.086540	-116.024805	4,186	1,500	Weapons Related	1.4 kt	170
18:02:46.00	37.007098	-116.059089	3,995	-955	Weapons Related	Less than 20 kt	1038
13:30:00.00	37.162684	-116.075033	4,386	-743	Weapons Related	Less than 20 kt	512
15:30:00.16	37.117214	-116.019751	4,363	-1,070	Weapons Related	Less than 20 kt	785
18:40:00.04	37.102659	-116.020804	4,326	-1,842	Weapons Related	Less than 20 kt	448
03:00:00.00	11.608900	162.321300	0	8	Weapons Related	11 kt	137
13:30:00.15	37.113711	-116.032882	4,265	-395	Weapons Related	Less than 20 kt	375
14:00:00.09	37.149828	-116.083132	4,368	-1,368	Weapons Related	20 to 150 kt	867
17:00:00.00	37.109551	-116.318154	5,178	3	Weapons Effects	Low	272
17:00:00.00	37.119142	-116.303697	5,136	3	Weapons Effects	Low	265
15:00:00.06	37.227939	-116.375590	6,799	-2,015	Weapons Related	20 to 150 kt	1001
06:00:00.14	37.184127	-116.201996	7,071	-930	Weapons Related	5 kt	173
21:00:00.08	51.436120	179.179220	125	-2,297	Vela Uniform	80 kt	430
16:32:00.16	37.121890	-116.084712	4,275	-1,071	Weapons Related	Less than 20 kt	696
15:15:00.04	37.006540	-116.023673	3,963	-1,240	Weapons Related	Less than 20 kt	626
17:00:00.08	37.078621	-116.044656	4,109	-1,853	Weapons Related	20 to 150 kt	839
19:12:00.00	37.063384	-116.046158	4,067	-1,500	Weapons Related	20 to 150 kt	1047
19:00:00.00	37.049193	-116.034571	4,028	-484	Safety Experiment	1.5 tons	161
15:37:37.12	37.095580	-116.051591	4,145	-1,095	Weapons Related	Less than 20 kt	356
18:00:00.16	37.126555	-116.049629	4,204	-596	Weapons Related	500 tons	202
17:25:00.12	37.168631	-116.206954	7,477	-1,320	Weapons Related	Low	300
18:00:00.00	11.535000	162.345000	0	14	Weapons Related	57 kt	129
15:30:00.04	37.000975	-116.010018	3,951	-788	Weapons Related	Less than 20 kt	531
18:00:00.16	37.124194	-116.040829	4,202	-196	Weapons Related	Low	302
15:20:00.09	37.080135	-116.072758	4,144	-1,350	Weapons Related	20 to 150 kt	917
14:00:00.04	37.012140	-115.992813	4,008	-790	Weapons Related	Less than 20 kt	649
17:30:00.00	11.693940	165.416375	0	12	Weapons Related	213 kt	134
18:03:00.08	37.124049	-116.122860	4,526	-1,250	Weapons Related	Less than 20 kt	964
00:00:00.00	37.193049	-116.201457	6,725	-125	Safety Experiment	13 tons	164
17:00:00.11	37.023603	-116.029178	3,983	-1,402	Weapons Related	Less than 20 kt	780
17:00:00.11	37.009057	-116.201913	6,422	-1,020	Weapons Effects	Low	261
15:00:00.17	37.120187	-116.063150	4,220	-2,260	Weapons Related	20 to 150 kt	810
20:45:00.00	37.165768	-116.039213	4,312	-577	Plowshare	2.2 kt	516
13:00:00.09	37.350295	-116.321103	6,873	-2,988	Weapons Related	200 to 1,000 kt	778
14:10:00.13	37.046073	-116.019218	4,026	-642	Weapons Related	Low	330
17:23:30.04	37.017616	-116.040704	3,978	-1,053	Weapons Related	Less than 20 kt	424
15:37:43.10	37.116165	-116.028403	4,298	-600	Weapons Related	Less than 20 kt	436
11:20:00.00	37.126459	-116.041931	4,202	50	Weapons Related	Zero	189
18:30:00.10	37.027781	-116.040620	3,995	-1,197	Weapons Related	Less than 20 kt	852
22:00:00.00	37.193429	-116.201671	6,712	-183	Safety Experiment	1 gram	162

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
702	Merida ☹	06/07/1972	LLNL	NNSS	U2dn	Shaft
401	Merlin ☹	02/16/1965	LANL	NNSS	U3ct	Shaft
270	Merrimac ☹	07/13/1962	LLNL	NNSS	U3bd	Shaft
691	Mescalero	01/05/1972	LANL	NNSS	U3gu	Shaft
235	Mesilla	05/09/1962	LANL	Christmas Island area	----	Airdrop
725	Mesita	05/09/1973	LANL	NNSS	U3jd	Shaft
61	MET	04/15/1955	LANL/DoD	NNSS	Area 5	Tower
1032	Metropolis	03/10/1990	LLNL	NNSS	U2gh	Shaft
499	Mickey ☹	05/10/1967	LANL	NNSS	U7m	Shaft
938	Midas Myth/Milagro ☹	02/15/1984	LANL/DoD	NNSS	U12t.04	Tunnel
992	Middle Note	03/18/1987	LLNL/DoD	NNSS	U12n.21	Tunnel
505	Midi Mist	06/26/1967	LLNL/DoD	NNSS	U12n.02	Tunnel
999	Midland	07/16/1987	LANL/UK	NNSS	U7by	Shaft
719	Miera ☹	03/08/1973	LANL	NNSS	U7ad	Shaft
797	Mighty Epic	05/12/1976	LLNL/DoD	NNSS	U12n.10	Tunnel
976	Mighty Oak	04/10/1986	LLNL/DoD	NNSS	U12t.08	Tunnel
31	Mike	10/31/1952	LANL	Enewetak Atoll	----	Surface
539	Milk Shake	03/25/1968	LLNL/DoD	NNSS	U5k	Shaft
969	Mill Yard	10/09/1985	LANL/DoD	NNSS	U12n.20	Tunnel
613	Milrow	10/02/1969	LANL	Amchitka, Alaska	----	Shaft
1036	Mineral Quarry	07/25/1990	LANL/DoD	NNSS	U12n.22	Tunnel
956	Minero ☹	12/20/1984	LANL	NNSS	U3lt	Shaft
879	Miners Iron	10/31/1980	LANL/DoD	NNSS	U12n.11	Tunnel
752	Ming Blade	06/19/1974	LANL/DoD	NNSS	U12n.08	Tunnel
575	Ming Vase	11/20/1968	LANL/DoD	NNSS	U16a.04	Tunnel
924	Mini Jade	05/26/1983	LANL/DoD	NNSS	U12n.12	Tunnel
673	Miniata ☹	07/08/1971	LLNL	NNSS	U2bu	Shaft
199	Mink ☹	10/29/1961	LANL	NNSS	U3ae	Shaft
367	Minnow ☹	05/15/1964	LANL	NNSS	U3cv	Shaft
646	Mint Leaf	05/05/1970	LLNL/DoD	NNSS	U12t.01	Tunnel
609	Minute Steak ☹	09/12/1969	LLNL/DoD	NNSS	U11f	Shaft
1004	Mission Cyber	12/02/1987	LLNL/DoD	NNSS	U12p.02	Tunnel
997	Mission Ghost	06/20/1987	LANL/DoD	NNSS	U12t.09	Tunnel
281	Mississippi ☹	10/05/1962	LLNL	NNSS	U9ad	Shaft
1019	Misty Echo	12/10/1988	LANL/DoD	NNSS	U12n.23	Tunnel
698	Misty North	05/02/1972	LANL/DoD	NNSS	U12n.05	Tunnel
960	Misty Rain	04/06/1985	LLNL/DoD	NNSS	U12n.17	Tunnel
775	Mizzen ☹	06/03/1975	LANL	NNSS	U7ah	Shaft
427	Moa ☹	09/01/1965	LANL	NNSS	U3ed	Shaft
977	Mogollon ☹	04/20/1986	LANL	NNSS	U3li	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
15:20:00.16	37.115841	-116.086199	4,258	-670	Weapons Related	Less than 20 kt	702
17:30:00.04	37.051593	-116.024664	4,038	-972	Weapons Related	10.1 kt	401
16:00:00.15	37.055018	-116.034262	4,041	-1,356	Weapons Related	Intermediate	270
15:10:00.04	37.045609	-116.030413	4,020	-394	Weapons Related	Less than 20 kt	691
17:01:00.00	1.565000	-157.365000	0	2,450	Weapons Related	100 kt	235
13:30:00.04	37.006221	-116.016942	3,960	-490	Weapons Related	Less than 20 kt	725
19:15:00.00	36.797923	-115.929776	3,078	400	Weapons Effects	22 kt	61
16:00:00.08	37.112457	-116.056047	4,177	-1,540	Weapons Related	20 to 150 kt	1032
13:40:00.04	37.077804	-115.996158	4,280	-1,639	Weapons Related	20 to 200 kt	499
17:00:00.11	37.221336	-116.181950	6,811	-1,184	Weapons Effects	Less than 20 kt	938
18:28:00.09	37.210189	-116.209439	7,383	-1,308	Weapons Effects	Less than 20 kt	992
16:00:00.08	37.202059	-116.208708	7,306	-1,237	Weapons Effects	Less than 20 kt	505
19:00:00.08	37.103504	-116.024223	4,300	-1,597	Joint US-UK	20 to 150 kt	999
16:10:00.19	37.103545	-116.027600	4,285	-1,865	Weapons Related	20 to 200 kt	719
19:50:00.17	37.209010	-116.213330	7,384	-1,306	Weapons Effects	Less than 20 kt	797
14:08:30.10	37.218276	-116.183982	6,924	-1,294	Weapons Effects	Less than 20 kt	976
19:15:00.00	11.667000	162.189900	10	7	Weapons Related	10.4 Mt	31
18:44:27.04	36.871674	-115.931994	3,349	-868	Weapons Effects	Less than 20 kt	539
21:40:00.13	37.209113	-116.205988	7,317	-1,217	Weapons Effects	Less than 20 kt	969
22:06:00.04	51.415670	179.179870	130	-4.003	Weapons Related	About 1 Mt	613
15:00:00.06	37.206822	-116.215129	7,359	-1,278	Weapons Effects	Less than 20 kt	1036
16:20:00.11	37.011898	-116.045573	3,985	-803	Weapons Related	Less than 20 kt	956
18:00:00.09	37.211210	-116.206250	7,347	-1,278	Weapons Effects	Less than 20 kt	879
16:00:00.08	37.210258	-116.208127	7,344	-1,272	Weapons Effects	Less than 20 kt	752
18:00:00.03	37.009784	-116.207296	6,425	-1,010	Weapons Effects	Less than 20 kt	575
14:30:00.09	37.208676	-116.205904	7,401	-1,244	Weapons Effects	Less than 20 kt	924
14:00:00.08	37.110078	-116.052290	4,179	-1,735	Plowshare	83 kt	673
18:30:00.13	37.048520	-116.031965	4,028	-630	Weapons Related	Low	199
16:15:00.12	37.041639	-116.013094	4,022	-792	Weapons Related	Less than 20 kt	367
15:30:00.17	37.216486	-116.184897	6,957	-1,330	Weapons Effects	Less than 20 kt	646
18:02:20.42	36.877168	-115.929364	3,393	-868	Weapons Effects	Less than 20 kt	609
16:30:00.08	37.234603	-116.164246	6,407	-888	Weapons Effects	Less than 20 kt	1004
16:00:00.18	37.219905	-116.178662	6,706	-1,054	Weapons Effects	Less than 20 kt	997
17:00:00.16	37.139355	-116.051195	4,234	-1,622	Weapons Related	115 kt	281
20:30:00.06	37.198995	-116.210314	7,413	-1,312	Weapons Effects	Less than 150 kt	1019
19:15:00.04	37.207611	-116.209613	7,303	-1,234	Weapons Effects	Less than 20 kt	698
23:15:00.09	37.200782	-116.208047	7,345	-1,275	Weapons Effects	Less than 20 kt	960
14:40:00.11	37.094783	-116.036976	4,180	-2,090	Weapons Related	20 to 200 kt	775
20:08:00.04	37.037256	-116.014845	4,005	-635	Weapons Related	Less than 20 kt	427
15:12:30.07	37.011608	-116.046918	3,985	-851	Weapons Related	Less than 20 kt	977

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
81	Mohawk	07/02/1956	LLNL	Enewetak Atoll	----	Tower
900	Molbo	02/12/1982	LLNL	NNSS	U20ag	Shaft
1017	Monahans-A 🍷	11/09/1988	LANL	NNSS	U3lk	Shaft
1017	Monahans-B	11/09/1988	LANL	NNSS	U6i	Shaft
701	Monero	05/19/1972	LANL	NNSS	U3jq	Shaft
1043	Montello	04/16/1991	LLNL	NNSS	U20bf	Shaft
908	Monterey 🍷	07/29/1982	LLNL	NNSS	U4aj	Shaft
165	Mora	09/29/1958	LANL	NNSS	Area 7	Balloon
115	Morgan	10/07/1957	LLNL	NNSS	Area 9	Balloon
650	Morrone	05/21/1970	LANL	NNSS	U3ei	Shaft
51	Moth	02/22/1955	LANL	NNSS	Area 3	Tower
395	Mudpack 🍷	12/16/1964	LLNL/DoD	NNSS	U10n	Shaft
787	Muenster	01/03/1976	LLNL	NNSS	U19e	Shaft
935	Muggins 🍷	12/09/1983	LANL	NNSS	U3ls	Shaft
1029	Muleshoe	11/15/1989	LANL	NNSS	U7bk	Shaft
342	Mullet	10/17/1963	LLNL	NNSS	U2ag	Shaft
941	Mundo 🍷	05/01/1984	LANL/UK	NNSS	U7bo	Shaft
411	Muscovy 🍷	04/23/1965	LANL	NNSS	U3dx	Shaft
492	Mushroom 🍷	03/03/1967	LANL	NNSS	U3ef	Shaft
237	Muskegon	05/11/1962	LLNL	Christmas Island area	----	Airdrop
345	Mustang 🍷	11/15/1963	LLNL	NNSS	U9at	Shaft
677	Nama-Amaryllis	08/05/1971	LLNL	NNSS	U9ITS XY-31	Shaft
677	Nama-Mephisto	08/05/1971	LLNL	NNSS	U9ITS Z-27	Shaft
246	Nambe	05/27/1962	LANL	Christmas Island area	----	Airdrop
34	Nancy	03/24/1953	LANL	NNSS	Area 4	Tower
338	Narraguagus	09/27/1963	LLNL	NNSS	U2f	Shaft
485	Nash 🍷	01/19/1967	LLNL	NNSS	U2ce	Shaft
334	Natches	08/23/1963	LLNL	NNSS	U9ak1	Shaft
721	Natoma	04/05/1973	LLNL	NNSS	U10aw	Shaft
83	Navajo	07/10/1956	LANL	Bikini Atoll	----	Barge
934	Navata	09/29/1983	LANL	NNSS	U3lb	Shaft
907	Nebbiolo	06/24/1982	LANL	NNSS	U19ae	Shaft
49	Nectar	05/13/1954	LANL	Enewetak Atoll	----	Barge
171	Neptune	10/14/1958	LLNL	NNSS	U12c.03	Tunnel
859	Nessel 🍷	08/29/1979	LLNL/UK	NNSS	U2ep	Shaft
482	New Point 🍷	12/13/1966	LLNL/DoD	NNSS	U11c	Shaft
474	Newark 🍷	09/29/1966	LLNL	NNSS	U10u	Shaft
111	Newton	09/16/1957	LANL	NNSS	Area 7	Balloon
1010	Nightingale	06/22/1988	LLNL	NNSS	U2ey	Shaft
587	Nipper 🍷	02/04/1969	LANL	NNSS	U3gl	Shaft

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Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
18:06:00.00	11.627589	162.295691	10	300	Weapons Related	360 kt	81
14:55:00.08	37.224276	-116.463540	6,234	-2,093	Weapons Related	20 to 150 kt	900
20:15:00.08	36.991144	-116.021947	3,945	-951	Weapons Related	Less than 20 kt	1017
20:15:00.08	36.988677	-116.021971	3,942	-951	Weapons Related	Less than 20 kt	1017
17:00:00.05	37.064656	-116.002614	4,175	-1,763	Weapons Related	Less than 20 kt	701
15:30:00.07	37.245385	-116.442525	6,522	-2,105	Weapons Related	20 to 150 kt	1043
20:05:00.08	37.102259	-116.075843	4,200	-1,312	Weapons Related	20 to 150 kt	908
14:05:00.00	37.086540	-116.024805	4,186	1,500	Weapons Related	2 kt	165
13:00:00.00	37.134742	-116.041648	4,214	500	Weapons Related	8 kt	115
14:15:00.03	37.070762	-116.013873	4,148	-1,584	Weapons Related	20 to 200 kt	650
13:45:00.00	37.095488	-116.103616	4,026	300	Weapons Related	2 kt	51
20:10:00.10	37.177757	-116.067879	4,386	-498	Weapons Effects	2.7 kt	395
19:15:00.16	37.296498	-116.334072	6,919	-4,765	Weapons Related	200 to 1,000 kt	787
16:00:00.11	37.012705	-116.046567	3,987	-800	Weapons Related	Less than 20 kt	935
20:20:00.12	37.106469	-116.014246	4,391	-802	Weapons Related	Less than 20 kt	1029
15:00:00.15	37.130761	-116.067831	4,270	-198	Safety Experiment	Low	342
19:05:00.09	37.106175	-116.023250	4,328	-1,857	Joint US-UK	20 to 150 kt	941
21:44:00.04	37.017373	-115.996175	3,991	-592	Weapons Related	Less than 20 kt	411
15:19:00.04	37.039433	-116.011061	4,019	-589	Weapons Related	Less than 20 kt	492
15:37:00.00	1.565000	-157.365000	0	2,995	Weapons Related	50 kt	237
15:00:00.15	37.132248	-116.047757	4,212	-544	Weapons Related	Low	345
18:07:45.20	37.145034	-116.034165	4,266	-895	Weapons Related	Less than 20 kt	677
18:07:45.20	37.140628	-116.032143	4,275	-800	Weapons Related	Less than 20 kt	677
17:02:00.00	1.550000	-157.350000	0	7,140	Weapons Related	43 kt	246
13:10:00.00	37.095488	-116.103616	4,309	300	Weapons Related	24 kt	34
17:30:00.15	37.154731	-116.074231	4,360	-493	Weapons Related	Low	338
16:45:00.14	37.143608	-116.136077	4,764	-1,194	Weapons Related	39 kt	485
13:20:00.15	37.124913	-116.036120	4,227	-194	Weapons Related	Low	334
14:50:00.16	37.177828	-116.054766	4,297	-800	Weapons Related	Less than 20 kt	721
17:56:00.00	11.679000	165.391500	0	15	Weapons Related	4.5 Mt	83
15:00:00.09	37.053360	-116.021222	4,048	-600	Safety Experiment	Less than 20 kt	934
14:15:00.09	37.236163	-116.371062	6,775	-2,098	Weapons Related	20 to 150 kt	907
18:20:00.00	11.666600	162.190000	0	7	Weapons Related	1.69 Mt	49
18:00:00.00	37.193809	-116.200563	7,530	-98	Safety Experiment	115 tons	171
15:08:00.17	37.121173	-116.067457	4,221	-1,522	Joint US-UK	20 to 150 kt	859
21:00:00.08	36.877209	-115.938776	3,381	-785	Weapons Effects	Less than 20 kt	482
14:45:30.09	37.168610	-116.046919	4,285	-750	Weapons Related	Less than 20 kt	474
12:50:00.00	37.086540	-116.024805	4,186	1,500	Weapons Related	12 kt	111
14:00:00.08	37.166110	-116.073116	4,384	-780	Safety Experiment	Less than 150 kt	1010
15:00:00.04	37.002620	-116.010004	3,953	-790	Weapons Related	Less than 20 kt	587

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
888	Niza ☾	07/10/1981	LLNL	NNSS	U9cr	Shaft
561	Noggin ☾	09/06/1968	LLNL	NNSS	U9bx	Shaft
541	Noor ☾	04/10/1968	LLNL	NNSS	U2be	Shaft
866	Norbo	03/08/1980	LLNL	NNSS	U8c	Shaft
946	Normanna ☾	07/12/1984	LLNL	NNSS	U10cb	Shaft
301	Numbat ☾	12/12/1962	LANL	NNSS	U3bu	Shaft
127	Nutmeg	05/21/1958	LLNL	Bikini Atoll	----	Barge
140	Oak	06/28/1958	LANL	Enewetak Atoll	----	Barge
494	Oakland	04/04/1967	LLNL	NNSS	U2bi	Shaft
808	Oarlock ☾	02/16/1977	LANL	NNSS	U3km	Shaft
772	Obar	04/30/1975	LANL	NNSS	U7ag	Shaft
180	Oberon	10/22/1958	LLNL	NNSS	Area 8	Tower
695	Ocate ☾	03/30/1972	LANL	NNSS	U3jp	Shaft
454	Ochre	04/29/1966	LANL	NNSS	U3ec	Shaft
351	Oconto ☾	01/23/1964	LLNL	NNSS	U9ay	Shaft
858	Offshore ☾	08/08/1979	LANL	NNSS	U3ks	Shaft
149	Olive	07/22/1958	LLNL	Enewetak Atoll	----	Barge
695	Onaja ☾	03/30/1972	LANL	NNSS	U3js	Shaft
153	Orange	08/12/1958	LANL/DoD	Johnston Island area	----	Rocket
418	Organdy ☾	06/11/1965	LLNL	NNSS	U9bo	Shaft
942	Orkney	05/02/1984	LLNL	NNSS	U10be	Shaft
78	Osage	06/16/1956	LANL	Enewetak Atoll	----	Airdrop
709	Oscuro ☾	09/21/1972	LANL	NNSS	U7z	Shaft
158	Otero	09/12/1958	LANL	NNSS	U3q	Shaft
258	Otowi	06/22/1962	LANL	Christmas Island area	----	Airdrop
97	Owens	07/25/1957	LLNL	NNSS	Area 9	Balloon
233	Paca ☾	05/07/1962	LANL	NNSS	U3ax	Shaft
582	Packard ☾	01/15/1969	LLNL	NNSS	U2u	Shaft
248	Packrat ☾	06/06/1962	LANL	NNSS	U3aw	Shaft
317	Paisano ☾	04/24/1963	LLNL	NNSS	U9w1	Shaft
738	Pajara ☾	12/12/1973	LANL	NNSS	U3ji	Shaft
408	Palanquin	04/14/1965	LLNL	NNSS	U20k	Crater
1023	Palisade-1 ☾	05/15/1989	LLNL	NNSS	U4at	Shaft
1023	Palisade-2 ☾	05/15/1989	LLNL	NNSS	U4at	Shaft
1023	Palisade-3 ☾	05/15/1989	LLNL	NNSS	U4at	Shaft
894	Paliza ☾	10/01/1981	LANL	NNSS	U7bd	Shaft
268	Pamlico	07/11/1962	LLNL	Christmas Island area	----	Airdrop
215	Pampas ☾	03/01/1962	LANL/UK	NNSS	U3al	Shaft
979	Panamint	05/21/1986	LLNL	NNSS	U2gb	Shaft
998	Panchuela ☾	06/30/1987	LANL	NNSS	U3mg	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
14:00:00.10	37.128556	-116.034645	4,242	-1,120	Weapons Related	Less than 20 kt	888
14:00:00.13	37.136018	-116.048028	4,220	-1,909	Weapons Related	20 to 200 kt	561
14:00:00.00	37.154329	-116.079724	4,385	-1,253	Weapons Related	20 to 200 kt	541
15:35:00.09	37.179898	-116.083993	4,515	-889	Weapons Related	Less than 20 kt	866
14:00:00.09	37.191937	-116.035247	4,404	-656	Weapons Related	Less than 20 kt	946
18:45:00.12	37.046058	-116.016476	4,030	-761	Weapons Related	Low	301
21:20:00.00	11.503000	165.374000	0	12	Weapons Related	25.1 kt	127
19:30:00.00	11.605086	162.100486	0	6	Weapons Related	8.9 Mt	140
14:20:00.15	37.161930	-116.083098	4,423	-543	Weapons Related	Less than 20 kt	494
17:53:00.07	37.013438	-116.029435	3,970	-1,042	Weapons Related	Less than 20 kt	808
15:00:01.90	37.108805	-116.029665	4,286	-1,866	Weapons Related	20 to 200 kt	772
20:30:00.00	37.182847	-116.069270	4,446	25	Safety Experiment	Zero	180
21:00:00.08	37.004445	-116.015738	3,958	-689	Weapons Related	Less than 20 kt	695
13:33:00.04	37.043620	-116.023357	4,013	-414	Safety Experiment	Less than 20 kt	454
16:00:00.15	37.126372	-116.037164	4,221	-868	Weapons Related	10.5 kt	351
15:00:00.11	37.014700	-116.008872	3,966	-1,301	Weapons Related	20 to 150 kt	858
20:30:00.00	11.678501	162.208073	0	8	Weapons Related	202 kt	149
21:00:00.04	37.005427	-116.020939	3,960	-915	Weapons Related	Less than 20 kt	695
10:30:00.00	16.358333	-169.535556	0	141,000	Weapons Effects	3.8 Mt	153
20:28:37.11	37.115727	-116.024123	4,332	-568	Weapons Related	Less than 20 kt	418
13:50:00.09	37.198428	-116.054836	4,522	-688	Weapons Related	Less than 20 kt	942
01:14:00.00	11.540150	162.356400	0	670	Weapons Related	1.7 kt	78
15:30:00.19	37.082010	-116.037435	4,108	-1,838	Weapons Related	20 to 200 kt	709
20:00:00.00	37.049848	-116.032715	4,032	-480	Safety Experiment	38 tons	158
16:00:00.00	1.550000	-157.350000	0	9,011	Weapons Related	81.5 kt	258
13:30:00.00	37.134742	-116.041648	4,215	500	Weapons Related	9.7 kt	97
19:33:00.14	37.046518	-116.025875	4,021	-848	Weapons Related	Low	233
19:00:00.07	37.147869	-116.066530	4,315	-810	Weapons Effects	10 kt	582
17:00:00.12	37.045669	-116.040155	4,022	-860	Weapons Related	Low	248
16:09:30.14	37.120479	-116.037045	4,225	-190	Weapons Related	Low	317
19:00:00.10	36.991440	-116.024995	3,945	-913	Weapons Related	Less than 20 kt	738
13:14:00.10	37.280320	-116.524449	6,194	-280	Plowshare	4.3 kt	408
13:10:00.09	37.107563	-116.121757	4,479	-1,100	Weapons Related	Less than 20 kt	1023
13:10:00.09	37.107563	-116.121757	4,479	-1,280	Safety Experiment	Less than 20 kt	1023
13:10:00.09	37.107563	-116.121757	4,479	-1,324	Safety Experiment	Less than 20 kt	1023
19:00:00.10	37.081571	-116.009622	4,224	-1,549	Weapons Related	20 to 150 kt	894
15:37:00.00	1.230000	-157.180000	0	14,330	Weapons Related	3.88 Mt	268
19:10:00.09	37.041217	-116.029549	4,012	-1,191	Joint US-UK	9.5 kt	215
13:59:00.08	37.124987	-116.061260	4,219	-1,575	Weapons Related	Less than 20 kt	979
16:05:00.10	36.998545	-116.043942	3,957	-1,047	Weapons Related	Less than 20 kt	998

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
840	Panir	08/31/1978	LLNL	NNSS	U19yS	Shaft
385	Par ☹	10/09/1964	LLNL	NNSS	U2p	Shaft
687	Parnassia ☹	11/30/1971	LLNL	NNSS	U2bc	Shaft
393	Parrot ☹	12/16/1964	LANL	NNSS	U3dk	Shaft
98	Pascal-A	07/26/1957	LANL	NNSS	U3j	Shaft
103	Pascal-B	08/27/1957	LANL	NNSS	U3d	Shaft
116	Pascal-C	12/06/1957	LANL	NNSS	U3e	Shaft
223	Passaic ☹	04/06/1962	LLNL	NNSS	U9l	Shaft
278	Peba ☹	09/20/1962	LANL	NNSS	U3bb	Shaft
681	Pederal	09/29/1971	LANL	NNSS	U3hg	Shaft
332	Pekan ☹	08/12/1963	LANL	NNSS	U3bw	Shaft
660	Penasco ☹	11/19/1970	LANL	NNSS	U3hl	Shaft
854	Pepato	06/11/1979	LLNL	NNSS	U20ad	Shaft
861	Pera ☹	09/08/1979	LLNL	NNSS	U10bd	Shaft
489	Persimmon ☹	02/23/1967	LANL	NNSS	U3dn	Shaft
256	Petit	06/19/1962	LLNL	Christmas Island area	----	Airdrop
417	Petrel ☹	06/11/1965	LANL	NNSS	U3dy	Shaft
620	Piccalilli ☹	11/21/1969	LANL	NNSS	U3fc	Shaft
359	Pike ☹	03/13/1964	LANL	NNSS	U3cy	Shaft
462	Pile Driver	06/02/1966	LANL/DoD	NNSS	U15a.01	Tunnel
453	Pin Stripe	04/25/1966	LANL/DoD	NNSS	U11b	Shaft
150	Pine	07/26/1958	LLNL	Enewetak Atoll	----	Barge
889	Pineau	07/16/1981	LANL	NNSS	U7ao	Shaft
742	Pinedrops-Bayou	01/10/1974	LLNL	NNSS	U10as	Shaft
742	Pinedrops-Sloat	01/10/1974	LLNL	NNSS	U10as	Shaft
742	Pinedrops-Tawny	01/10/1974	LLNL	NNSS	U10as	Shaft
364	Pipefish ☹	04/29/1964	LANL	NNSS	U3co	Shaft
614	Pipkin	10/08/1969	LLNL	NNSS	U20b	Shaft
459	Piranha ☹	05/13/1966	LANL	NNSS	U7e	Shaft
147	Pisonia	07/17/1958	LANL	Enewetak Atoll	----	Barge
654	Piton-A	05/28/1970	LLNL	NNSS	U9ITS Y-30	Shaft
654	Piton-B ☹	05/28/1970	LLNL	NNSS	U9ITS X-27	Shaft
653	Piton-C	05/28/1970	LLNL	NNSS	U9ITS AA-25	Shaft
441	Plaid II ☹	02/03/1966	LLNL	NNSS	U2r	Shaft
621	Planer	11/21/1969	LANL	NNSS	U3el	Shaft
225	Platte	04/14/1962	LLNL	NNSS	U12k.01	Tunnel
214	Platypus	02/24/1962	LANL	NNSS	U3ad	Shaft
379	Player	08/27/1964	LLNL	NNSS	U9cc	Shaft
324	Pleasant ☹	05/29/1963	LLNL	NNSS	U9ah	Shaft
607	Pliers ☹	08/27/1969	LANL	NNSS	U3gn	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
14:00:00.16	37.275877	-116.358226	6,694	-2,234	Weapons Related	20 to 150 kt	840
14:00:00.12	37.151301	-116.077864	4,368	-1,331	Plowshare	38 kt	385
15:45:00.15	37.160401	-116.071105	4,360	-1,085	Weapons Related	Less than 20 kt	687
20:00:00.04	37.034775	-116.013150	4,001	-592	Weapons Related	1.3 kt	393
08:00:00.00	37.051722	-116.034289	4,033	-500	Safety Experiment	56 tons	98
22:35:00.00	37.049000	-116.034810	4,028	-500	Safety Experiment	1 gram	103
22:15:00.00	37.049895	-116.031734	4,031	-250	Safety Experiment	38 tons	116
18:00:00.16	37.117628	-116.044882	4,183	-766	Weapons Related	Low	223
17:00:00.12	37.054996	-116.030153	4,043	-792	Weapons Related	Low	278
14:00:00.04	37.010988	-116.008219	3,961	-1,242	Weapons Related	Less than 20 kt	681
23:45:00.13	37.041660	-116.016517	4,015	-992	Weapons Related	Low	332
15:00:00.04	37.014743	-116.016750	3,969	-889	Weapons Related	Less than 20 kt	660
14:00:00.17	37.289635	-116.456143	6,366	-2,239	Weapons Related	20 to 150 kt	854
17:02:00.09	37.154948	-116.039058	4,289	-656	Weapons Related	Less than 20 kt	861
18:34:00.04	37.017493	-116.016727	3,972	-981	Weapons Related	Less than 20 kt	489
15:01:00.00	1.470000	-157.320000	0	14,995	Weapons Related	2.2 kt	256
19:45:00.04	37.042764	-116.017885	4,016	-593	Weapons Related	1.3 kt	417
14:52:00.04	37.031147	-116.002910	4,010	-1,292	Weapons Related	20 to 200 kt	620
16:02:00.12	37.050421	-116.012330	4,060	-376	Weapons Related	Less than 20 kt	359
15:30:00.09	37.227022	-116.056412	5,090	-1,518	Weapons Effects	62 kt	462
18:38:00.14	36.887407	-115.941661	3,586	-970	Weapons Effects	Less than 20 kt	453
20:30:00.00	11.651260	162.219650	0	8	Weapons Related	2 Mt	150
15:00:00.10	37.088650	-116.020237	4,220	-680	Weapons Related	Less than 20 kt	889
15:38:00.17	37.174076	-116.051669	4,298	-1,125	Weapons Related	Less than 20 kt	742
15:38:00.17	37.174076	-116.051669	4,298	-700	Weapons Related	Less than 20 kt	742
15:38:00.17	37.174076	-116.051669	4,298	-925	Weapons Related	Less than 20 kt	742
20:47:00.12	37.039520	-116.027503	4,006	-859	Weapons Related	Less than 20 kt	364
14:30:00.14	37.256661	-116.441629	6,534	-2,046	Weapons Related	200 to 1,000 kt	614
13:30:00.04	37.086803	-116.034310	4,146	-1,800	Weapons Related	20 to 200 kt	459
23:00:00.00	11.541000	162.320000	0	6	Weapons Related	255 kt	147
12:00:00.16	37.143931	-116.033488	4,268	-776	Weapons Related	Less than 20 kt	654
12:00:00.16	37.140640	-116.034881	4,255	-754	Weapons Related	Less than 20 kt	654
11:45:00.20	37.138423	-116.030786	4,284	-331	Weapons Related	Less than 20 kt	653
18:17:37.10	37.126269	-116.070340	4,260	-881	Weapons Related	Less than 20 kt	441
14:52:00.08	37.014780	-116.023600	3,971	-1,240	Weapons Related	Less than 20 kt	621
18:00:00.13	37.221976	-116.158313	6,281	-631	Weapons Related	1.85 kt	225
16:30:00.13	37.048288	-116.032772	4,026	-190	Weapons Related	Low	214
14:30:00.15	37.117311	-116.041530	4,201	-296	Safety Experiment	Less than 20 kt	379
15:03:30.16	37.128027	-116.044289	4,198	-692	Weapons Related	Low	324
13:45:00.04	37.021455	-116.038959	3,984	-784	Weapons Related	Less than 20 kt	607

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
747	Plomo	05/01/1974	LANL	NNSS	U3ff	Shaft
617	Pod-A	10/29/1969	LLNL	NNSS	U2ch	Shaft
617	Pod-B	10/29/1969	LLNL	NNSS	U2ci	Shaft
617	Pod-C	10/29/1969	LLNL	NNSS	U2cj	Shaft
617	Pod-D ☹	10/29/1969	LLNL	NNSS	U2ck	Shaft
523	Polka	12/06/1967	LLNL	NNSS	U10ai	Shaft
734	Polygonum	10/02/1973	LLNL	NNSS	U2by	Shaft
537	Pommard	03/14/1968	LANL	NNSS	U3ee	Shaft
422	Pongee	07/22/1965	LLNL	NNSS	U2ah	Shaft
968	Ponil ☹	09/27/1985	LANL	NNSS	U7bv	Shaft
795	Pool	03/17/1976	LANL	NNSS	U19p	Shaft
145	Poplar	07/12/1958	LLNL	Bikini Atoll	----	Barge
756	Portmanteau ☹	08/30/1974	LLNL	NNSS	U2ax	Shaft
765	Portola	02/06/1975	LLNL	NNSS	U10bb	Shaft
765	Portola-Larkin	02/06/1975	LLNL	NNSS	U10bb	Shaft
732	Portulaca ☹	06/28/1973	LLNL	NNSS	U2bv	Shaft
60	Post	04/09/1955	LLNL	NNSS	Area 9	Tower
746	Potrero ☹	04/23/1974	LLNL	NNSS	U2eb	Shaft
731	Potrillo ☹	06/21/1973	LANL	NNSS	U7af	Shaft
757	Pratt ☹	09/25/1974	LANL	NNSS	U3hq	Shaft
994	Presidio	04/22/1987	LANL	NNSS	U6d	Shaft
91	Priscilla	06/24/1957	LANL/DoD	NNSS	Area 5	Balloon
65	Project 56 No. 1	11/01/1955	LANL	NNSS	Area 11a	Surface
66	Project 56 No. 2	11/03/1955	LANL	NNSS	Area 11b	Surface
67	Project 56 No. 3	11/05/1955	LANL	NNSS	Area 11c	Surface
68	Project 56 No. 4	01/18/1956	LANL	NNSS	Area 11d	Surface
86	Project 57 No. 1	04/24/1957	LANL/DoD	NTTR	----	Surface
464	Puce	06/10/1966	LANL	NNSS	U3bs	Shaft
763	Puddle	11/26/1974	LANL	NNSS	U3kg	Shaft
446	Purple ☹	03/18/1966	LANL	NNSS	U3ds	Shaft
597	Purse ☹	05/07/1969	LLNL	NNSS	U20v	Shaft
755	Puye ☹	08/14/1974	LANL	NNSS	U3jl	Shaft
868	Pyramid ☹	04/16/1980	LANL	NNSS	U7be	Shaft
846	Quargel ☹	11/18/1978	LLNL/UK	NNSS	U2fb	Shaft
169	Quay	10/10/1958	LANL	NNSS	Area 7	Tower
910	Queso	08/11/1982	LLNL	NNSS	U10bf	Shaft
231	Questa	05/04/1962	LANL	Christmas Island area	----	Airdrop
152	Quince	08/06/1958	LLNL/DoD	Enewetak Atoll	----	Surface
850	Quinella ☹	02/08/1979	LANL	NNSS	U4l	Shaft
247	Raccoon ☹	06/01/1962	LANL	NNSS	U3ajS	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
14:02:00.21	37.031057	-115.986466	4,114	-490	Weapons Related	Less than 20 kt	747
20:00:00.04	37.140159	-116.131374	4,672	-875	Weapons Related	16.7 kt (Total)	617
20:00:00.04	37.140399	-116.142708	4,894	-816	Weapons Related	16.7 kt (Total)	617
20:00:00.04	37.136282	-116.140839	4,839	-560	Weapons Related	16.7 kt (Total)	617
20:00:00.04	37.135291	-116.136825	4,761	-1,025	Weapons Related	16.7 kt (Total)	617
13:00:00.00	37.159219	-116.053821	4,263	-640	Weapons Related	Less than 20 kt	523
14:30:00.17	37.158739	-116.073860	4,366	-700	Weapons Related	Less than 20 kt	734
15:19:00.06	37.047677	-116.011675	4,053	-686	Weapons Related	1.5 kt	537
13:21:08.11	37.131746	-116.067724	4,270	-440	Weapons Related	Less than 20 kt	422
14:15:00.08	37.089762	-116.002635	4,300	-1,197	Weapons Related	Less than 20 kt	968
14:15:00.09	37.255836	-116.329461	6,899	-2,891	Weapons Related	200 to 500 kt	795
03:30:00.00	11.694458	165.265189	0	12	Weapons Related	9.3 Mt	145
15:00:00.16	37.152431	-116.084203	4,397	-2,150	Weapons Related	20 to 200 kt	756
15:30:00.17	37.178360	-116.052424	4,305	-651	Weapons Related	Less than 20 kt	765
15:30:00.16	37.178360	-116.052424	4,305	-901	Weapons Related	Less than 20 kt	765
19:15:12.40	37.148376	-116.086726	4,388	-1,528	Weapons Related	20 to 200 kt	732
12:30:00.00	37.122090	-116.035276	4,236	300	Weapons Related	2 kt	60
15:13:00.16	37.159923	-116.077282	4,387	-692	Weapons Related	Less than 20 kt	746
14:45:00.08	37.091989	-116.028092	4,207	-1,860	Weapons Related	20 to 200 kt	731
14:00:00.08	37.012074	-116.031159	3,970	-1,030	Weapons Related	Less than 20 kt	757
15:00:00.09	36.983093	-116.005447	3,932	-1,049	Weapons Related	Less than 20 kt	994
13:30:00.00	36.797923	-115.929776	3,076	700	Weapons Related	37 kt	91
22:10:00.00	36.984430	-115.961640	4,200	3	Safety Experiment	Zero	65
21:15:00.00	36.980075	-115.959525	4,200	3	Safety Experiment	Zero	66
19:55:00.00	36.975695	-115.957455	4,200	3	Safety Experiment	36 grams	67
21:30:00.00	36.971340	-115.955350	4,200	3	Safety Experiment	1 ton	68
14:27:00.00	37.319302	-115.906141	4,585	0	Safety Experiment	Zero	86
14:30:00.04	37.059367	-116.039682	4,053	-1,593	Weapons Related	Less than 20 kt	464
15:00:00.90	37.000983	-116.012073	4,002	-604	Safety Experiment	Less than 20 kt	763
19:00:00.04	37.009209	-116.009951	3,959	-1,092	Weapons Related	Less than 20 kt	446
13:45:00.04	37.282839	-116.501537	6,088	-1,964	Weapons Related	20 to 200 kt	597
14:00:00.11	37.023366	-116.037231	3,987	-1,411	Weapons Related	Less than 20 kt	755
20:00:00.09	37.101071	-116.031400	4,241	-1,900	Weapons Related	20 to 150 kt	868
19:00:00.17	37.126821	-116.084743	4,271	-1,778	Joint US-UK	20 to 150 kt	846
14:30:00.00	37.094825	-116.024500	4,249	100	Weapons Related	79 tons	169
15:00:00.00	37.189744	-116.048555	4,387	-710	Weapons Related	Less than 20 kt	910
19:04:00.00	1.565000	-157.365000	0	5,230	Weapons Related	670 kt	231
02:15:00.00	11.545500	162.352700	10	3	Weapons Related	Zero	152
20:00:00.09	37.102435	-116.055712	4,159	-1,900	Weapons Related	20 to 150 kt	850
17:00:00.14	37.045566	-116.035331	4,021	-539	Weapons Related	Low	247

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
558	Rack ☹	08/15/1968	LLNL	NNSS	U9ap	Shaft
112	Rainier	09/19/1957	LLNL	NNSS	U12b	Tunnel
1036	Randsburg	07/25/1990	LLNL/DoD	NNSS	U12n.22a	Tunnel
276	Raritan ☹	09/06/1962	LLNL	NNSS	U9u	Shaft
37	Ray	04/11/1953	LLNL	NNSS	Area 4	Tower
829	Reblochon ☹	02/23/1978	LLNL	NNSS	U2en	Shaft
443	Red Hot	03/05/1966	LANL/DoD	NNSS	U12g.06	Tunnel
804	Redmud ☹	12/08/1976	LANL	NNSS	U7ab	Shaft
138	Redwood	06/27/1958	LLNL	Bikini Atoll	----	Barge
440	Reo ☹	01/22/1966	LLNL	NNSS	U10m	Shaft
442	Rex	02/24/1966	LLNL	NNSS	U20h	Shaft
1011	Rhyolite	06/22/1988	LLNL	NNSS	U2ey	Shaft
826	Rib ☹	12/14/1977	LANL	NNSS	U3jv	Shaft
551	Rickey ☹	06/15/1968	LANL	NNSS	U19c	Shaft
254	Rinconada	06/15/1962	LANL	Christmas Island area	----	Airdrop
203	Ringtail ☹	12/17/1961	LANL	NNSS	U3ak	Shaft
176	Rio Arriba	10/18/1958	LANL	NNSS	Area 3	Tower
726	Rio Blanco-1	05/17/1973	LLNL	near Meeker, Colorado	----	Shaft
726	Rio Blanco-2	05/17/1973	LLNL	near Meeker, Colorado	----	Shaft
726	Rio Blanco-3	05/17/1973	LLNL	near Meeker, Colorado	----	Shaft
877	Riola	09/25/1980	LLNL	NNSS	U2eq	Shaft
484	Rivet I	01/18/1967	LLNL	NNSS	U10aa	Shaft
487	Rivet II ☹	01/26/1967	LLNL	NNSS	U10z	Shaft
491	Rivet III ☹	03/02/1967	LLNL	NNSS	U10y	Shaft
798	Rivoli	05/20/1976	LLNL	NNSS	U2eg	Shaft
283	Roanoke ☹	10/12/1962	LLNL	NNSS	U9q	Shaft
936	Romano ☹	12/16/1983	LLNL	NNSS	U2ex	Shaft
45	Romeo	03/26/1954	LANL	Bikini Atoll	----	Barge
971	Roquefort ☹	10/16/1985	LLNL	NNSS	U4as	Shaft
132	Rose	06/02/1958	LANL	Enewetak Atoll	----	Barge
896	Rousanne ☹	11/12/1981	LANL/UK	NNSS	U4p	Shaft
470	Rovena ☹	08/10/1966	LLNL	NNSS	U10s	Shaft
807	Rudder ☹	12/28/1976	LANL	NNSS	U7ajS	Shaft
608	Rulison	09/10/1969	LLNL	near Parachute, Colorado	----	Shaft
844	Rummy ☹	09/27/1978	LANL	NNSS	U7au	Shaft
181	Rushmore	10/22/1958	LLNL	NNSS	Area 9	Balloon

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
17:00:00.00	37.123685	-116.049093	4,201	-655	Weapons Related	Less than 20 kt	558
16:59:59.45	37.195732	-116.204029	7,515	-899	Weapons Related	1.7 kt	112
15:00:00.00	37.206910	-116.215115	7,359	-1,278	Weapons Related	Less than 20 kt	1036
17:00:00.20	37.130265	-116.045605	4,204	-513	Weapons Related	Low	276
12:45:00.00	37.098891	-116.093345	4,026	100	Weapons Related	200 tons	37
17:00:00.16	37.123631	-116.064701	4,226	-2,160	Weapons Related	20 to 150 kt	829
18:15:00.10	37.174446	-116.209226	7,632	-1,330	Weapons Effects	Less than 20 kt	443
14:49:30.08	37.079216	-116.002487	4,251	-1,400	Weapons Related	Less than 20 kt	804
17:30:00.00	11.693940	165.416375	0	11	Weapons Related	412 kt	138
15:17:19.10	37.157159	-116.039558	4,296	-683	Weapons Related	Less than 20 kt	440
15:55:07.04	37.271783	-116.434726	6,557	-2,202	Weapons Related	19 kt	442
14:00:00.08	37.166110	-116.073116	4,384	-680	Weapons Related	Less than 150 kt	1011
15:00:00.17	37.017504	-116.018778	3,973	-698	Weapons Related	Less than 20 kt	826
13:59:59.97	37.264858	-116.315533	7,032	-2,242	Weapons Related	20 to 200 kt	551
16:00:00.00	1.470000	-157.195000	0	9,105	Weapons Related	800 kt	254
16:35:00.13	37.043114	-116.026182	4,014	-1,191	Weapons Related	Low	203
14:25:00.00	37.040875	-116.026750	4,010	73	Weapons Related	90 tons	176
16:00:00.12	39.793250	-108.367210	6,630	-5,840	Plowshare	33 kt	726
16:00:00.12	39.793250	-108.367210	6,630	-6,230	Plowshare	33 kt	726
16:00:00.12	39.793250	-108.367210	6,630	-6,690	Plowshare	33 kt	726
15:26:30.08	37.115814	-116.065438	4,203	-1,391	Weapons Related	1.07 kt	877
14:55:00.00	37.165072	-116.047418	4,273	-498	Weapons Related	Less than 20 kt	484
16:30:00.00	37.164751	-116.048930	4,267	-648	Weapons Related	Less than 20 kt	487
15:00:00.00	37.165822	-116.049570	4,270	-898	Weapons Related	Less than 20 kt	491
17:30:00.16	37.137153	-116.067448	4,284	-656	Weapons Related	Less than 20 kt	798
15:00:00.16	37.122688	-116.051680	4,198	-580	Weapons Related	Low	283
18:30:00.09	37.140400	-116.072939	4,311	-1,690	Weapons Related	20 to 150 kt	936
18:30:00.00	11.697130	165.274200	0	7	Weapons Related	11 Mt	45
21:35:00.09	37.109900	-116.122255	4,488	-1,363	Weapons Related	20 to 150 kt	971
18:45:00.00	11.532600	162.342600	0	15	Weapons Related	15 kt	132
15:00:00.10	37.108104	-116.049847	4,166	-1,697	Joint US-UK	20 to 150 kt	896
13:16:00.07	37.168619	-116.048635	4,281	-635	Weapons Related	Less than 20 kt	470
18:00:00.08	37.100446	-116.037331	4,205	-2,095	Weapons Related	20 to 150 kt	807
21:00:00.01	39.405350	-107.948470	8,200	-8,425	Plowshare	40 kt	608
17:20:00.08	37.079756	-116.052192	4,111	-2,099	Weapons Related	20 to 150 kt	844
23:40:00.00	37.134742	-116.041648	4,244	500	Weapons Related	188 tons	181

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
535	Russet	03/05/1968	LANL/DoD	NNSS	U6a	Shaft
35	Ruth	03/31/1953	LLNL	NNSS	Area 7	Tower
928	Sabado	08/11/1983	LANL	NNSS	U3lc	Shaft
263	Sacramento ☹	06/30/1962	LLNL	NNSS	U9v	Shaft
387	Salmon	10/22/1964	LLNL/DoD	near Hattiesburg, Mississippi	----	Shaft
962	Salut	06/12/1985	LLNL	NNSS	U20ak	Shaft
177	San Juan	10/20/1958	LANL	NNSS	U3p	Shaft
824	Sandreef ☹	11/09/1977	LANL	NNSS	U7aq	Shaft
185	Sanford	10/26/1958	LLNL	NNSS	Area 5	Balloon
191	Santa Fe	10/30/1958	LANL	NNSS	Area 7	Balloon
290	Santee ☹	10/27/1962	LLNL	NNSS	U10f	Shaft
745	Sapello	04/12/1974	LANL	NNSS	U3ge	Shaft
694	Sappho	03/23/1972	LLNL	NNSS	U2dh #2	Shaft
347	Sardine ☹	12/04/1963	LANL	NNSS	U3ch	Shaft
333	Satsop ☹	08/15/1963	LLNL	NNSS	U2g	Shaft
100	Saturn	08/10/1957	LLNL	NNSS	U12c.02	Tunnel
838	Satz ☹	07/07/1978	LLNL	NNSS	U2dq	Shaft
469	Saxon ☹	07/28/1966	LLNL	NNSS	U2cc	Shaft
519	Sazerac ☹	10/25/1967	LANL	NNSS	U3fa	Shaft
146	Scaevola	07/14/1958	LANL	Enewetak Atoll	----	Barge
819	Scantling ☹	08/19/1977	LANL	NNSS	U4h	Shaft
415	Scaup ☹	05/14/1965	LANL	NNSS	U3daS	Shaft
1007	Schellbourne ☹	05/13/1988	LLNL	NNSS	U2gf	Shaft
577	Schooner	12/08/1968	LLNL	NNSS	U20u	Crater
580	Scissors ☹	12/12/1968	LANL	NNSS	U3gh	Shaft
501	Scotch	05/23/1967	LANL	NNSS	U19aS	Shaft
427	Screamer ☹	09/01/1965	LANL	NNSS	U3dg	Shaft
656	Scree-Acajou ☹	10/13/1970	LLNL	NNSS	U9ITS X-24	Shaft
656	Scree-Alhambra ☹	10/13/1970	LLNL	NNSS	U9ITS Z-21	Shaft
656	Scree-Chamois	10/13/1970	LLNL	NNSS	U9ITS Z-24	Shaft
543	Scroll	04/23/1968	LLNL/DoD	NNSS	U19n	Shaft
818	Scupper	08/19/1977	LANL	NNSS	U3hj	Shaft
619	Scuttle	11/13/1969	LLNL	NNSS	U2bh	Shaft
739	Seafoam	12/13/1973	LLNL	NNSS	U2ea	Shaft
825	Seamount ☹	11/17/1977	LANL	NNSS	U3kp	Shaft
615	Seaweed B	10/16/1969	LANL	NNSS	U3hk-d	Shaft
612	Seaweed-C	10/01/1969	LANL	NNSS	U3hk-e	Shaft
612	Seaweed-D	10/01/1969	LANL	NNSS	U3hk-f	Shaft
612	Seaweed-E	10/01/1969	LANL	NNSS	U3hk-c	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
15:30:00.04	36.969998	-116.056680	3,930	-393	Weapons Related	Less than 20 kt	535
13:00:00.00	37.085291	-116.022137	4,000	305	Weapons Related	200 tons	35
14:00:00.12	36.997640	-116.003537	3,946	-1,050	Weapons Related	Less than 20 kt	928
21:30:00.16	37.117366	-116.048287	4,177	-489	Weapons Related	Low	263
16:00:00.00	31.142300	-89.570000	265	-2,710	Vela Uniform	5.3 kt	387
15:15:00.08	37.247799	-116.489947	6,235	-1,995	Weapons Related	20 to 150 kt	962
14:30:00.00	37.049734	-116.033384	4,029	-234	Safety Experiment	Zero	177
22:00:00.08	37.072058	-116.050879	4,094	-2,299	Weapons Related	20 to 150 kt	824
10:20:00.00	36.797923	-115.929776	3,077	1,500	Weapons Related	4.9 kt	185
03:00:00.00	37.086540	-116.024805	4,186	1,500	Weapons Related	1.3 kt	191
15:00:00.15	37.149260	-116.054375	4,254	-1,048	Weapons Related	Low	290
15:15:00.08	37.014894	-116.045008	3,989	-593	Weapons Related	Less than 20 kt	745
18:50:00.16	37.113001	-116.081690	4,241	-649	Weapons Related	Less than 20 kt	694
16:38:30.13	37.039537	-116.030248	4,007	-860	Weapons Related	Low	347
13:00:00.15	37.154044	-116.077499	4,373	-738	Weapons Related	Low	333
00:59:55.10	37.193818	-116.200738	7,061	-128	Safety Experiment	Zero	100
14:00:00.17	37.111749	-116.078002	4,232	-1,033	Weapons Related	Less than 20 kt	838
15:33:30.13	37.140440	-116.134038	4,719	-504	Plowshare	1.2 kt	469
14:30:00.06	37.031558	-116.027224	3,995	-989	Weapons Related	Less than 20 kt	519
04:00:00.00	11.550000	162.342500	0	20	Safety Experiment	Zero	146
17:55:00.10	37.109987	-116.055377	4,175	-2,300	Weapons Related	20 to 150 kt	819
17:32:36.23	37.058797	-116.011408	4,098	-1,401	Weapons Related	Less than 20 kt	415
15:35:00.11	37.124387	-116.072996	4,249	-1,519	Weapons Related	Less than 150 kt	1007
16:00:00.14	37.343363	-116.566766	5,563	-365	Plowshare	30 kt	577
15:20:00.04	37.003882	-116.040135	3,965	-789	Weapons Related	Less than 20 kt	580
14:00:00.04	37.275028	-116.370854	6,761	-3,207	Weapons Related	155 kt	501
20:08:00.04	37.022945	-116.009829	3,975	-991	Weapons Effects	Less than 20 kt	427
15:05:00.02	37.137402	-116.034915	4,252	-818	Weapons Related	Less than 20 kt	656
15:05:00.02	37.134039	-116.032198	4,265	-631	Weapons Related	Less than 20 kt	656
15:05:00.02	37.137302	-116.032171	4,271	-330	Safety Experiment	Less than 20 kt	656
17:01:30.08	37.337655	-116.376459	6,754	-740	Vela Uniform	Less than 20 kt	543
17:32:00.10	37.017575	-116.032483	3,976	-1,475	Weapons Related	Less than 20 kt	818
15:15:00.13	37.164582	-116.075702	4,394	-540	Weapons Related	1.7 kt	619
15:17:00.17	37.161349	-116.073925	4,374	-650	Weapons Related	Less than 20 kt	739
19:30:00.08	37.020556	-116.025943	3,979	-1,214	Weapons Related	Less than 20 kt	825
14:00:00.04	37.012530	-115.999129	3,976	-389	Safety Experiment	Less than 20 kt	615
14:30:00.04	37.011379	-115.999485	3,974	-389	Safety Experiment	Less than 20 kt	612
14:30:00.04	37.010461	-116.000435	3,971	-389	Safety Experiment	Less than 20 kt	612
14:30:00.04	37.013686	-115.999465	3,974	-408	Safety Experiment	Less than 20 kt	612

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
884	Seco	02/25/1981	LLNL	NNSS	U8l	Shaft
264	Sedan	07/06/1962	LLNL	NNSS	U10h	Crater
403	Seersucker	02/19/1965	LLNL	NNSS	U9bm	Shaft
74	Seminole	06/06/1956	LANL	Enewetak Atoll	----	Surface
431	Sepia ☾	11/12/1965	LANL	NNSS	U3en	Shaft
142	Sequoia	07/01/1958	LANL	Enewetak Atoll	----	Barge
965	Serena	07/25/1985	LLNL	NNSS	U20an	Shaft
881	Serpa	12/17/1980	LLNL/UK	NNSS	U19ai	Shaft
553	Sevilla	06/25/1968	LANL	NNSS	U3fk	Shaft
916	Seyval ☾	11/12/1982	LANL	NNSS	U3lm	Shaft
792	Shallows ☾	02/26/1976	LANL	NNSS	U3jf	Shaft
639	Shaper ☾	03/23/1970	LANL	NNSS	U7r	Shaft
101	Shasta	08/18/1957	LLNL	NNSS	Area 2	Tower
584	Shave ☾	01/22/1969	LANL	NNSS	U3gk	Shaft
862	Sheepshead	09/26/1979	LANL	NNSS	U19aa	Shaft
343	Shoal	10/26/1963	LANL/DoD	near Fallon, Nevada	----	Shaft
196	Shrew	09/16/1961	LANL	NNSS	U3ac	Shaft
542	Shuffle ☾	04/18/1968	LLNL	NNSS	U10t	Shaft
481	Sidecar ☾	12/13/1966	LANL	NNSS	U3ez	Shaft
438	Sienna ☾	01/18/1966	LANL	NNSS	U3cj	Shaft
733	Silene	06/28/1973	LLNL	NNSS	U9ck	Shaft
476	Simms ☾	11/05/1966	LLNL	NNSS	U10w	Shaft
39	Simon	04/25/1953	LANL	NNSS	Area 1	Tower
560	Sled	08/29/1968	LANL	NNSS	U19i	Shaft
271	Small Boy	07/14/1962	LANL/DoD	NNSS	Area 5	Tower
105	Smoky	08/31/1957	LLNL	NNSS	Area 8	Tower
641	Snubber	04/21/1970	LANL	NNSS	U3ev 2S	Shaft
178	Socorro	10/22/1958	LANL	NNSS	Area 7	Balloon
708	Solano	08/09/1972	LANL	NNSS	U3jx	Shaft
715	Solanum	12/14/1972	LLNL	NNSS	U9ITS W-24.5	Shaft
353	Solendon ☾	02/12/1964	LANL	NNSS	U3cz	Shaft
740	Spar	12/19/1973	LANL	NNSS	U3jr	Shaft
605	Spider-A ☾	08/14/1969	LLNL	NNSS	U2bp #1	Shaft
605	Spider-B ☾	08/14/1969	LLNL	NNSS	U2bp #2	Shaft
382	Spoon ☾	09/11/1964	LLNL	NNSS	U9bd	Shaft
802	Sprit	11/10/1976	LANL	NNSS	U3hc	Shaft
555	Spud ☾	07/17/1968	LANL	NNSS	U3fy	Shaft
295	St. Lawrence	11/09/1962	LLNL	NNSS	U2b	Shaft
527	Staccato ☾	01/19/1968	LLNL	NNSS	U10ah	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
15:00:00.08	37.181851	-116.085121	4,538	-656	Weapons Related	Less than 20 kt	884
17:00:00.15	37.176960	-116.046256	4,317	-635	Plowshare	104 kt	264
15:28:54.11	37.117230	-116.031855	4,269	-473	Weapons Related	Less than 20 kt	403
00:55:00.00	11.672427	162.210365	4	0	Weapons Related	13.7 kt	74
18:00:00.05	37.049936	-116.022961	4,033	-791	Weapons Related	Less than 20 kt	431
18:30:00.00	11.543050	162.347000	0	6	Weapons Related	5.2 kt	142
14:00:00.09	37.297192	-116.438962	6,462	-1,960	Weapons Related	20 to 150 kt	965
15:10:00.09	37.324737	-116.316055	6,742	-1,879	Joint US-UK	20 to 150 kt	881
15:30:00.04	37.041530	-115.993218	4,111	-1,177	Weapons Related	Less than 20 kt	553
19:17:00.10	37.023620	-116.032947	3,984	-1,201	Weapons Related	Less than 20 kt	916
14:50:00.09	37.028476	-116.016633	3,987	-803	Weapons Related	Less than 20 kt	792
23:05:00.04	37.086185	-116.021966	4,195	-1,839	Weapons Related	20 to 200 kt	639
12:00:00.00	37.127880	-116.107280	4,387	500	Weapons Related	17 kt	101
15:00:00.04	37.015444	-115.995165	3,996	-790	Weapons Related	Less than 20 kt	584
15:00:00.09	37.229014	-116.364938	6,758	-2,100	Weapons Related	20 to 150 kt	862
17:00:00.10	39.200060	-118.381210	5,250	-1,211	Vela Uniform	12 kt	343
19:45:00.12	37.048408	-116.033673	4,027	-322	Weapons Related	Low	196
14:05:00.00	37.152467	-116.037881	4,285	-1,619	Weapons Related	20 to 200 kt	542
17:50:00.04	37.034742	-116.007668	4,010	-788	Weapons Related	Less than 20 kt	481
18:35:00.04	37.037278	-116.019303	4,003	-902	Weapons Related	Less than 20 kt	438
19:45:00.16	37.114860	-116.041790	4,202	-650	Weapons Related	Less than 20 kt	733
14:45:00.00	37.169907	-116.048082	4,286	-652	Plowshare	2.3 kt	476
12:30:00.00	37.053040	-116.103504	4,239	300	Weapons Related	43 kt	39
22:45:00.04	37.250267	-116.347773	6,836	-2,391	Weapons Related	20 to 200 kt	560
18:30:00.00	36.802465	-115.925910	3,078	10	Weapons Effects	Low	271
12:30:00.00	37.187200	-116.068670	4,479	700	Weapons Related	44 kt	105
14:30:00.04	37.054842	-115.988992	4,199	-1,127	Weapons Effects	12.7 kt	641
13:30:00.00	37.086540	-116.024805	1,450	1,450	Weapons Related	6 kt	178
13:31:10.04	37.003153	-116.017568	3,957	-440	Safety Experiment	Less than 20 kt	708
15:30:00.16	37.138037	-116.035596	4,246	-600	Weapons Related	Less than 20 kt	715
15:38:00.12	37.056564	-116.030109	4,046	-493	Weapons Related	Less than 20 kt	353
17:30:00.04	37.005723	-116.019762	3,960	-487	Safety Experiment	Less than 20 kt	740
14:30:00.04	37.160197	-116.064476	4,326	-700	Weapons Related	Less than 20 kt	605
14:30:00.04	37.158140	-116.064657	4,325	-747	Weapons Related	Less than 20 kt	605
14:00:00.10	37.113676	-116.026366	4,316	-590	Weapons Related	Less than 20 kt	382
14:58:00.08	37.035902	-116.018283	4,000	-601	Weapons Related	Less than 20 kt	802
14:00:00.04	37.000912	-115.999744	3,956	-788	Weapons Related	Less than 20 kt	555
18:00:00.16	37.163767	-116.074164	4,384	-546	Weapons Related	Low	295
15:00:00.00	37.156337	-116.054750	4,261	-1,455	Weapons Related	20 to 200 kt	527

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
508	Stanley ☹	07/27/1967	LLNL	NNSS	U10q	Shaft
759	Stanyan ☹	09/26/1974	LLNL	NNSS	U2aw	Shaft
266	Starfish Prime	07/09/1962	LANL/DoD	Johnston Island area	----	Rocket
724	Starwort ☹	04/26/1973	LLNL	NNSS	U2bs	Shaft
480	Sterling	12/03/1966	LLNL/DoD	near Hattiesburg, Mississippi	----	Shaft
208	Stillwater ☹	02/08/1962	LLNL	NNSS	U9c	Shaft
525	Stilt	12/15/1967	LANL	NNSS	U3fh	Shaft
774	Stilton	06/03/1975	LLNL/DoD	NNSS	U20p	Shaft
538	Stinger	03/22/1968	LANL	NNSS	U19l	Shaft
205	Stoat ☹	01/09/1962	LANL	NNSS	U3ap	Shaft
563	Stoddard ☹	09/17/1968	LLNL	NNSS	U2cmS	Shaft
99	Stokes	08/07/1957	LANL	NNSS	Area 7	Balloon
322	Stones ☹	05/22/1963	LANL	NNSS	U9ae	Shaft
796	Strait ☹	03/17/1976	LANL	NNSS	U4a	Shaft
815	Strake ☹	08/04/1977	LANL	NNSS	U7ae	Shaft
361	Sturgeon ☹	04/15/1964	LANL	NNSS	U3bo	Shaft
449	Stutz ☹	04/06/1966	LLNL	NNSS	U2ca	Shaft
405	Suede	03/20/1965	LLNL	NNSS	U9bk	Shaft
21	Sugar	11/19/1951	LANL/DoD	NNSS	Area 9	Surface
396	Sulky	12/18/1964	LLNL	NNSS	U18d	Shaft
1037	Sundown-A	09/20/1990	LANL	NNSS	U1d	Shaft
1037	Sundown-B	09/20/1990	LANL	NNSS	U1d	Shaft
267	Sunset	07/10/1962	LANL	Christmas Island area	----	Airdrop
806	Sutter	12/21/1976	LLNL	NNSS	U2bw	Shaft
241	Swanee	05/14/1962	LLNL	Christmas Island area	----	Airdrop
504	Switch	06/22/1967	LLNL	NNSS	U9bv	Shaft
238	Swordfish	05/11/1962	LANL/DoD	Pacific	----	Underwater
131	Sycamore	05/31/1958	LLNL	Bikini Atoll	----	Barge
874	Tafi	07/25/1980	LLNL	NNSS	U20ae	Shaft
1000	Tahoka ☹	08/13/1987	LANL	NNSS	U3mf	Shaft
704	Tajique	06/28/1972	LANL	NNSS	U7aa	Shaft
980	Tajo ☹	06/05/1986	LANL	NNSS	U7bl	Shaft
168	Tamalpais	10/08/1958	LLNL	NNSS	U12b.02	Tunnel
463	Tan ☹	06/03/1966	LANL	NNSS	U7k	Shaft
245	Tanana	05/25/1962	LLNL	Christmas Island area	----	Airdrop
471	Tangerine	08/12/1966	LANL	NNSS	U3eb	Shaft
556	Tanya ☹	07/30/1968	LLNL	NNSS	U2dt	Shaft
458	Tapestry ☹	05/12/1966	LLNL	NNSS	U2an	Shaft
601	Tapper ☹	06/12/1969	LANL	NNSS	U3go	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
13:00:00.12	37.148685	-116.049404	4,237	-1,587	Weapons Related	20 to 200 kt	508
15:05:00.17	37.132581	-116.069261	4,271	-1,880	Weapons Related	20 to 200 kt	759
09:00:00.00	16.468422	-169.630075	0	250 miles	Weapons Effects	1.4 Mt	266
17:15:00.17	37.122999	-116.059385	4,226	-1,850	Weapons Related	90 kt	724
12:15:00.05	31.142300	-89.570000	265	-2,710	Vela Uniform	380 tons	480
18:00:00.16	37.127202	-116.053524	4,209	-595	Weapons Related	3.07 kt	208
15:00:00.04	37.036640	-116.002858	4,038	-1,091	Weapons Related	Less than 20 kt	525
14:20:00.17	37.340002	-116.523770	5,560	-2,400	Weapons Related	20 to 200 kt	774
15:00:00.04	37.332546	-116.311550	6,766	-2,191	Weapons Related	20 to 200 kt	538
16:30:00.14	37.044592	-116.035932	4,021	-992	Weapons Related	5.1 kt	205
14:00:00.04	37.119816	-116.128344	4,583	-1,535	Plowshare	31 kt	563
12:25:00.00	37.086540	-116.024805	4,186	1,500	Weapons Related	19 kt	99
15:40:00.14	37.111002	-116.039936	4,213	-1,290	Weapons Related	Intermediate	322
14:45:00.09	37.107238	-116.053345	4,169	-2,567	Weapons Related	200 to 500 kt	796
16:40:00.07	37.086522	-116.007738	4,266	-1,698	Weapons Related	20 to 150 kt	815
14:30:00.12	37.043873	-116.019236	4,019	-491	Weapons Related	Less than 20 kt	361
13:57:17.10	37.139472	-116.141747	4,872	-742	Weapons Related	Less than 20 kt	449
15:30:49.10	37.115376	-116.027364	4,307	-470	Weapons Related	Less than 20 kt	405
17:00:00.00	37.131467	-116.039417	4,215	4	Weapons Effects	1.2 kt	21
19:35:00.09	37.082661	-116.343440	5,329	-89	Plowshare	92 tons	396
16:15:00.00	37.038170	-116.057667	4,047	-887	Safety Experiment	Less than 20 kt	1037
16:15:00.00	37.038170	-116.057667	4,047	-840	Safety Experiment	Less than 20 kt	1037
16:33:00.00	1.520000	-157.280000	0	5,000	Weapons Related	1 Mt	267
15:58:00.16	37.151851	-116.064305	4,312	-657	Weapons Related	Less than 20 kt	806
15:21:00.00	1.570000	-157.365000	0	2,940	Weapons Related	97 kt	241
13:10:00.00	37.125507	-116.029525	4,277	-991	Plowshare	3.1 kt	504
20:02:00.00	31.233333	-124.216667	0	- - - -	Weapons Effects	Low	238
03:00:00.00	11.697275	165.280000	0	12	Weapons Related	92 kt	131
19:05:00.08	37.256269	-116.478298	6,189	-2,232	Weapons Related	20 to 150 kt	874
14:00:00.09	37.060912	-116.046175	4,067	-2,095	Weapons Related	20 to 150 kt	1000
16:30:00.07	37.069546	-115.992974	4,267	-1,090	Weapons Related	Less than 20 kt	704
15:04:00.06	37.098243	-116.016380	4,317	-1,700	Weapons Related	20 to 150 kt	980
22:00:00.13	37.195257	-116.201330	7,019	-330	Weapons Related	72 tons	168
14:00:00.04	37.068410	-116.036173	4,070	-1,840	Weapons Related	20 to 200 kt	463
16:08:00.00	1.550000	-157.350000	0	9,030	Weapons Related	2.6 kt	245
15:36:00.05	37.046264	-116.030188	4,021	-288	Safety Experiment	Less than 20 kt	471
13:00:00.00	37.116718	-116.083109	4,257	-1,250	Weapons Related	20 to 200 kt	556
19:37:26.20	37.134240	-116.071989	4,291	-816	Weapons Related	Less than 20 kt	458
14:00:00.04	37.008778	-116.031186	3,965	-994	Weapons Related	Less than 20 kt	601

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
865	Tarko ☹	02/28/1980	LLNL	NNSS	U2fd	Shaft
298	Taunton ☹	12/04/1962	LLNL	NNSS	U9aa	Shaft
151	Teak	08/01/1958	LANL/DoD	Johnston Island area	- - - -	Rocket
933	Techado	09/22/1983	LANL	NNSS	U4o	Shaft
412	Tee ☹	05/07/1965	LLNL	NNSS	U2ab	Shaft
321	Tejon	05/17/1963	LANL	NNSS	U3cg	Shaft
766	Teleme ☹	02/06/1975	LLNL	NNSS	U9cl	Shaft
762	Temescal	11/02/1974	LLNL	NNSS	U4ab	Shaft
447	Templar	03/24/1966	LLNL	NNSS	U9bt	Shaft
1039	Tenabo	10/12/1990	LLNL	NNSS	U20bb	Shaft
902	Tenaja ☹	04/17/1982	LANL	NNSS	U3lh	Shaft
299	Tendrac ☹	12/07/1962	LANL/UK	NNSS	U3ba	Shaft
398	Tern ☹	01/29/1965	LANL	NNSS	U3dw	Shaft
627	Terrine-White ☹	12/18/1969	LLNL	NNSS	U9bi #1	Shaft
627	Terrine-Yellow ☹	12/18/1969	LLNL	NNSS	U9bi #2	Shaft
52	Tesla	03/01/1955	LLNL	NNSS	Area 9	Tower
84	Tewa	07/20/1956	LLNL	Bikini Atoll	- - - -	Barge
1020	Texarkana ☹	02/10/1989	LANL	NNSS	U7ca	Shaft
596	Thistle	04/30/1969	LANL	NNSS	U7t	Shaft
541	Throw ☹	04/10/1968	LLNL	NNSS	U2bg	Shaft
425	Ticking	08/21/1965	LLNL	NNSS	U9bj	Shaft
955	Tierra	12/15/1984	LLNL	NNSS	U19ac	Shaft
294	Tightrope	11/04/1962	LANL/DoD	Johnston Island area	- - - -	Rocket
657	Tijeras ☹	10/14/1970	LANL	NNSS	U7y	Shaft
895	Tilci ☹	11/11/1981	LLNL	NNSS	U4ak	Shaft
576	Tinderbox	11/22/1968	LLNL	NNSS	U9az	Shaft
420	Tiny Tot	06/17/1965	LLNL/DoD	NNSS	U15e	Tunnel
285	Tioga	10/18/1962	LLNL	NNSS	U9f	Shaft
194	Titania	10/30/1958	LLNL	NNSS	Area 8	Tower
130	Tobacco	05/30/1958	LANL	Enewetak Atoll	- - - -	Barge
450	Tomato ☹	04/07/1966	LANL	NNSS	U3ek	Shaft
931	Tomme/Midnight Zephyr	09/21/1983	LLNL/DoD	NNSS	U12n.18	Tunnel
768	Topgallant ☹	02/28/1975	LANL	NNSS	U4e	Shaft
831	Topmast	03/23/1978	LANL	NNSS	U7ay	Shaft
532	Torch	02/21/1968	LANL	NNSS	U3fj	Shaft
991	Tornero ☹	02/11/1987	LANL	NNSS	U3ll	Shaft
340	Tornillo ☹	10/11/1963	LLNL	NNSS	U9aq	Shaft
600	Torrido ☹	05/27/1969	LANL	NNSS	U7w	Shaft
939	Tortugas ☹	03/01/1984	LANL	NNSS	U3gg	Shaft
961	Towanda	05/02/1985	LANL	NNSS	U19ab	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
15:00:00.09	37.126500	-116.089376	4,287	-1,209	Weapons Related	Less than 20 kt	865
16:00:00.15	37.128037	-116.050875	4,209	-749	Weapons Related	Low	298
10:50:00.00	16.743889	-169.533333	0	252,000	Weapons Effects	3.8 Mt	151
15:00:00.12	37.105563	-116.050269	4,159	-1,747	Weapons Related	Less than 150 kt	933
15:47:11.15	37.140318	-116.067522	4,297	-624	Weapons Effects	7 kt	412
14:55:00.00	37.048291	-116.033225	4,026	-245	Safety Experiment	Low	321
16:13:00.17	37.114067	-116.021904	4,354	-1,001	Weapons Related	Less than 20 kt	766
15:30:00.16	37.093142	-116.092544	4,234	-862	Weapons Related	Less than 20 kt	762
14:55:28.14	37.113290	-116.032221	4,271	-492	Plowshare	370 tons	447
17:30:00.08	37.247807	-116.495104	6,226	-1,969	Weapons Related	20 to 150 kt	1039
18:00:00.09	37.016770	-116.010735	3,952	-1,169	Weapons Related	Less than 20 kt	902
19:00:00.10	37.051697	-116.030177	4,033	-993	Joint US-UK	Low	299
18:22:00.03	37.044943	-116.014094	4,032	-691	Weapons Related	Less than 20 kt	398
19:00:00.04	37.120431	-116.035642	4,235	-1,500	Weapons Related	20 to 200 kt	627
19:00:00.04	37.120640	-116.029477	4,278	-1,370	Weapons Related	20 to 200 kt	627
13:30:00.00	37.125389	-116.048387	4,021	300	Weapons Related	7 kt	52
17:46:00.00	11.680000	165.341000	0	15	Weapons Related	5 Mt	84
20:06:00.06	37.076736	-116.001481	4,244	-1,654	Weapons Related	20 to 150 kt	1020
17:00:00.04	37.090220	-116.006509	4,291	-1,839	Weapons Related	20 to 200 kt	596
14:00:00.00	37.156631	-116.083142	4,408	-757	Weapons Related	Less than 20 kt	541
13:43:08.15	37.112583	-116.026890	4,314	-690	Weapons Related	Less than 20 kt	425
14:45:00.00	37.281310	-116.306296	7,038	-2,100	Weapons Related	20 to 150 kt	955
07:30:00.00	16.707419	-169.542406	0	tens of miles	Weapons Effects	Low	294
14:30:00.04	37.070608	-116.005994	4,187	-1,839	Weapons Related	20 to 200 kt	657
20:00:09.09	37.076273	-116.069360	4,131	-1,460	Weapons Related	20 to 150 kt	895
16:19:00.04	37.139862	-116.043129	4,225	-1,442	Weapons Related	Less than 20 kt	576
17:00:00.09	37.223368	-116.057840	5,022	-364	Weapons Effects	Less than 20 kt	420
15:00:00.15	37.128502	-116.041116	4,203	-195	Weapons Related	Low	285
20:34:00.00	37.177200	-116.070050	4,403	25	Safety Experiment	0.2 tons	194
02:15:00.00	11.691220	162.214650	0	10	Weapons Related	11.6 kt	130
22:27:30.04	37.017361	-115.993093	4,010	-742	Weapons Related	Less than 20 kt	450
15:00:00.09	37.209695	-116.210129	7,401	-1,328	Weapons Effects	Less than 20 kt	931
15:15:00.09	37.106153	-116.057123	4,173	-2,340	Weapons Related	20 to 200 kt	768
16:30:00.11	37.098815	-116.020490	4,296	-1,502	Weapons Related	Less than 20 kt	831
15:00:00.04	37.041584	-116.002819	4,059	-789	Weapons Related	Less than 20 kt	532
16:45:00.07	37.010640	-116.045556	3,981	-979	Weapons Related	Less than 20 kt	991
21:00:00.16	37.118693	-116.034731	4,244	-491	Plowshare	380 tons	340
14:15:00.04	37.075055	-115.996182	4,256	-1,689	Weapons Related	20 to 200 kt	600
17:45:00.09	37.065718	-116.047164	4,079	-2,095	Weapons Related	20 to 150 kt	939
15:20:00.08	37.253352	-116.326091	6,928	-2,166	Weapons Related	20 to 150 kt	961

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
311	Toyah ☹	03/15/1963	LLNL	NNSS	U9ac	Shaft
836	Transom	05/10/1978	LANL	NNSS	U4f	Shaft
455	Traveler ☹	05/04/1966	LLNL	NNSS	U2cd	Shaft
892	Trebbiano ☹	09/04/1981	LANL	NNSS	U3lj	Shaft
1	Trinity	07/16/1945	LANL	near Alamogordo, New Mexico	----	Tower
376	Trogon	07/24/1964	LANL	NNSS	U3dj	Shaft
658	Truchas-Chacon	10/28/1970	LANL	NNSS	U3hn	Shaft
658	Truchas-Chamisal	10/28/1970	LANL	NNSS	U3ho	Shaft
658	Truchas-Rodarte ☹	10/28/1970	LANL	NNSS	U3hm	Shaft
250	Truckee	06/09/1962	LLNL	Christmas Island area	----	Airdrop
758	Trumbull	09/26/1974	LLNL	NNSS	U4aa	Shaft
550	Tub-A ☹	06/06/1968	LLNL	NNSS	U10aj C	Shaft
550	Tub-B ☹	06/06/1968	LLNL	NNSS	U10aj B	Shaft
550	Tub-C	06/06/1968	LLNL	NNSS	U10aj F	Shaft
550	Tub-D	06/06/1968	LLNL	NNSS	U10aj D	Shaft
550	Tub-F	06/06/1968	LLNL	NNSS	U10aj A	Shaft
1024	Tulia	05/26/1989	LANL	NNSS	U4s	Shaft
714	Tuloso	12/12/1972	LANL	NNSS	U3gi	Shaft
349	Tuna	12/20/1963	LANL	NNSS	U3de	Shaft
624	Tun-A ☹	12/10/1969	LLNL	NNSS	U10am #1	Shaft
624	Tun-B ☹	12/10/1969	LLNL	NNSS	U10am #2	Shaft
624	Tun-C ☹	12/10/1969	LLNL	NNSS	U10am #3	Shaft
624	Tun-D ☹	12/10/1969	LLNL	NNSS	U10am #4	Shaft
363	Turf ☹	04/24/1964	LLNL	NNSS	U10c	Shaft
53	Turk	03/07/1955	LLNL	NNSS	Area 2	Tower
386	Turnstone	10/16/1964	LANL	NNSS	U3dt	Shaft
921	Turquoise ☹	04/14/1983	LANL	NNSS	U7bu	Shaft
416	Tweed ☹	05/21/1965	LLNL	NNSS	U9bn	Shaft
773	Tybo	05/14/1975	LLNL	NNSS	U20y	Shaft
579	Tyg-A ☹	12/12/1968	LLNL	NNSS	U2dc #4	Shaft
579	Tyg-B ☹	12/12/1968	LLNL	NNSS	U2dc #5	Shaft
579	Tyg-C ☹	12/12/1968	LLNL	NNSS	U2dc #3	Shaft
579	Tyg-D ☹	12/12/1968	LLNL	NNSS	U2dc #2	Shaft
579	Tyg-E ☹	12/12/1968	LLNL	NNSS	U2dc #1	Shaft
579	Tyg-F ☹	12/12/1968	LLNL	NNSS	U2dc #6	Shaft
506	Umber ☹	06/29/1967	LANL	NNSS	U3em	Shaft
133	Umbrella	06/09/1958	LANL/DoD	Enewetak Atoll	----	Underwater
22	Uncle	11/29/1951	LANL/DoD	NNSS	U10 Uncle	Crater
47	Union	04/25/1954	LANL	Bikini Atoll	----	Barge

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
16:22:53.14	37.125782	-116.045645	4,197	-429	Weapons Related	Low	311
15:00:00.07	37.087728	-116.053499	4,129	-2,100	Weapons Related	Zero	836
13:32:17.09	37.137027	-116.138007	4,781	-648	Weapons Related	Less than 20 kt	455
15:00:00.10	37.058040	-116.048943	4,062	-1,002	Weapons Related	Less than 20 kt	892
12:29:00.00	33.677280	-106.475378	4,624	100	Weapons Related	21 kt	1
18:30:00.04	37.046036	-116.013053	4,039	-633	Weapons Related	Less than 20 kt	376
14:30:00.03	37.013969	-116.018812	3,968	-389	Safety Experiment	Less than 20 kt	658
14:30:00.04	37.013968	-116.018127	3,968	-388	Safety Experiment	Less than 20 kt	658
14:30:00.04	37.014762	-116.020175	3,970	-874	Weapons Related	Less than 20 kt	658
15:37:00.00	1.490000	-157.327000	0	6,970	Weapons Related	210 kt	250
14:30:00.16	37.093157	-116.095630	4,251	-863	Weapons Related	Less than 20 kt	758
21:30:00.00	37.167432	-116.043359	4,294	-620	Weapons Related	Less than 20 kt	550
21:30:00.00	37.165358	-116.044309	4,285	-620	Weapons Related	Less than 20 kt	550
21:30:00.00	37.165346	-116.041550	4,298	-620	Weapons Related	Less than 20 kt	550
21:30:00.00	37.166936	-116.045676	4,282	-896	Weapons Related	Less than 20 kt	550
21:30:00.00	37.166925	-116.042920	4,294	-620	Weapons Related	Less than 20 kt	550
18:07:00.02	37.085818	-116.056000	4,125	-1,305	Weapons Related	Less than 20 kt	1024
16:30:00.04	37.031253	-116.022094	3,991	-889	Weapons Related	Less than 20 kt	714
15:24:00.13	37.052743	-116.034247	4,035	-1,359	Weapons Related	Low	349
15:30:00.07	37.167656	-116.080143	4,429	-655	Weapons Related	Less than 20 kt	624
15:30:00.07	37.169441	-116.080129	4,434	-636	Weapons Related	Less than 20 kt	624
15:30:00.07	37.167642	-116.077912	4,415	-636	Weapons Related	Less than 20 kt	624
15:30:00.07	37.169427	-116.077891	4,420	-841	Weapons Related	Less than 20 kt	624
20:10:00.15	37.149544	-116.056260	4,322	-1,661	Weapons Related	20 to 200 kt	363
13:20:00.00	37.138372	-116.118258	4,491	500	Weapons Related	43 kt	53
15:59:30.03	37.039550	-116.016800	3,996	-412	Weapons Related	Less than 20 kt	386
19:05:00.12	37.072790	-116.046825	4,088	-1,749	Weapons Related	Less than 150 kt	921
13:08:52.11	37.118498	-116.028555	4,292	-933	Weapons Related	Less than 20 kt	416
14:00:00.16	37.220730	-116.475069	6,257	-2,510	Weapons Related	200 to 1,000 kt	773
15:10:00.08	37.120775	-116.081431	4,265	-749	Weapons Related	Less than 20 kt	579
15:10:00.08	37.117543	-116.080434	4,254	-824	Weapons Related	Less than 20 kt	579
15:10:00.08	37.118001	-116.078105	4,249	-749	Weapons Related	Less than 20 kt	579
15:10:00.08	37.121234	-116.079102	4,261	-679	Weapons Related	Less than 20 kt	579
15:10:00.08	37.119849	-116.077439	4,254	-649	Weapons Related	Less than 20 kt	579
15:10:00.08	37.118828	-116.082599	4,264	-869	Weapons Related	Less than 20 kt	579
11:25:00.04	37.028519	-116.023488	3,988	-1,018	Weapons Effects	10 kt	506
23:15:00.00	11.378000	162.212000	0	-150	Weapons Effects	8 kt	133
20:00:00.00	37.169792	-116.043312	4,299	-17	Weapons Effects	1.2 kt	22
18:05:00.00	11.679000	165.391500	0	7	Weapons Related	6.9 Mt	47

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
119	Uranus	03/14/1958	LLNL	NNSS	U12c.01	Tunnel
163	Valencia	09/26/1958	LANL	NNSS	U3r	Shaft
590	Valise	03/18/1969	LLNL	NNSS	U9by	Shaft
567	Vat ☐	10/10/1968	LLNL	NNSS	U9cf	Shaft
957	Vaughn	03/15/1985	LANL	NNSS	U3lr	Shaft
722	Velarde ☐	04/25/1973	LANL	NNSS	U3jk	Shaft
118	Venus	02/22/1958	LLNL	NNSS	U12d.01	Tunnel
875	Verdello ☐	07/31/1980	LANL	NNSS	U3ku	Shaft
952	Vermejo ☐	10/02/1984	LANL	NNSS	U4r	Shaft
175	Vesta	10/17/1958	LLNL	NNSS	S9e	Surface
1051	Victoria	06/19/1992	LANL	NNSS	U3kv	Shaft
885	Vide	04/30/1981	LLNL	NNSS	U8k	Shaft
479	Vigil	11/22/1966	LLNL	NNSS	U10ad	Shaft
963	Ville ☐	06/12/1985	LLNL	NNSS	U4am	Shaft
953	Villita ☐	11/10/1984	LANL	NNSS	U3ld	Shaft
585	Vise ☐	01/30/1969	LANL	NNSS	U3ej	Shaft
507	Vito	07/14/1967	LLNL	NNSS	U10ab	Shaft
467	Vulcan ☐	06/25/1966	LLNL	NNSS	U2bd	Shaft
1003	Waco	12/01/1987	LANL	NNSS	U3lu	Shaft
404	Wagtail	03/03/1965	LANL	NNSS	U3an	Shaft
125	Wahoo	05/16/1958	LANL/DoD	Enewetak Atoll	----	Underwater
735	Waller	10/02/1973	LLNL	NNSS	U2bz	Shaft
136	Walnut	06/14/1958	LANL	Enewetak Atoll	----	Barge
488	Ward ☐	02/08/1967	LLNL	NNSS	U10x	Shaft
510	Washer	08/10/1967	LLNL	NNSS	U10r	Shaft
50	Wasp	02/18/1955	LANL	NNSS	Area 7	Airdrop
58	Wasp Prime	03/29/1955	LANL	NNSS	Area 7	Airdrop
565	Welder ☐	10/03/1968	LANL	NNSS	U3fs	Shaft
549	Wembley ☐	06/05/1968	LANL	NNSS	U3ey	Shaft
949	Wexford ☐	08/30/1984	LLNL	NNSS	U2cr	Shaft
107	Wheeler	09/06/1957	LLNL	NNSS	Area 9	Balloon
244	White ☐	05/25/1962	LLNL	NNSS	U9b	Shaft
1031	Whiteface-A	12/20/1989	LANL	NNSS	U3lp	Shaft
1031	Whiteface-B	12/20/1989	LANL	NNSS	U3lp	Shaft
113	Whitney	09/23/1957	LLNL	NNSS	Area 2	Tower
273	Wichita ☐	07/27/1962	LLNL	NNSS	U9y	Shaft
64	Wigwam	05/14/1955	LANL/DoD	Pacific	----	Underwater
90	Wilson	06/18/1957	LLNL	NNSS	Area 9	Balloon
588	Winch	02/04/1969	LANL	NNSS	U3gf	Shaft
583	Wineskin ☐	01/15/1969	LLNL	NNSS	U12r	Shaft

July 1945 through September 1992

Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
22:00:00.00	37.193818	-116.200738	6,751	-114	Safety Experiment	726 grams	119
20:00:00.00	37.049538	-116.030696	4,029	-484	Safety Experiment	2 tons	163
14:30:00.12	37.139091	-116.041715	4,225	-300	Safety Experiment	Less than 20 kt	590
14:30:00.00	37.133265	-116.043183	4,208	-640	Weapons Related	Less than 20 kt	567
16:31:00.10	37.058025	-116.046198	4,062	-1,396	Weapons Related	20 to 150 kt	957
22:25:00.07	36.993607	-116.021912	3,948	-908	Weapons Related	Less than 20 kt	722
01:00:00.00	37.193204	-116.201085	7,177	-100	Safety Experiment	1 gram	118
18:19:00.09	37.012995	-116.023615	3,970	-1,200	Weapons Related	Less than 20 kt	875
18:14:00.10	37.085180	-116.053674	4,119	-1,149	Weapons Related	Less than 20 kt	952
23:00:00.00	37.122600	-116.035400	4,226	0	Safety Experiment	24 tons	175
16:45:00.00	37.005372	-116.011008	3,956	-801	Weapons Related	Less than 20 kt	1051
14:35:00.08	37.177285	-116.085633	4,506	-1,061	Weapons Related	Less than 20 kt	885
15:00:00.13	37.169336	-116.049185	4,281	-307	Safety Experiment	Less than 20 kt	479
17:30:00.09	37.088265	-116.084808	4,189	-955	Weapons Related	Less than 20 kt	963
16:40:00.09	37.000056	-116.018245	3,952	-1,221	Weapons Related	Less than 20 kt	953
15:00:00.04	37.053271	-116.030130	4,038	-1,490	Weapons Related	20 to 200 kt	585
13:30:00.08	37.165201	-116.045800	4,280	-317	Safety Experiment	Less than 20 kt	507
17:13:00.07	37.155257	-116.073029	4,354	-1,057	Plowshare	25 kt	467
16:30:00.09	36.996362	-116.005332	3,946	-600	Weapons Related	Less than 20 kt	1003
19:13:00.03	37.064465	-116.038050	4,060	-2,459	Weapons Related	20 to 200 kt	404
01:30:00.00	11.343500	162.174900	0	-500	Weapons Effects	9 kt	125
15:15:00.16	37.153864	-116.068579	4,333	-1,020	Weapons Related	Less than 20 kt	735
18:30:00.00	11.684700	162.239850	0	7	Weapons Related	1.45 Mt	136
15:15:00.13	37.167476	-116.048002	4,278	-853	Weapons Related	Less than 20 kt	488
14:10:00.00	37.156644	-116.048142	4,257	-1,534	Weapons Related	Less than 20 kt	510
20:00:00.00	37.086535	-116.022735	4,195	762	Weapons Effects	1 kt	50
18:00:00.00	37.086535	-116.022735	4,194	739	Weapons Related	3 kt	58
14:00:00.04	37.046478	-116.030608	4,022	-386	Safety Experiment	Less than 20 kt	565
14:21:30.34	37.034796	-116.016922	3,998	-781	Weapons Related	Less than 20 kt	549
14:45:00.00	37.143840	-116.126129	4,604	-1,030	Weapons Related	Less than 20 kt	949
12:45:00.00	37.134742	-116.041648	4,230	500	Weapons Related	197 tons	107
15:00:00.15	37.124812	-116.052860	4,201	-632	Weapons Related	Low	244
22:00:00.06	37.025813	-116.032072	3,985	-646	Safety Experiment	Less than 20 kt	1031
22:00:00.06	37.025813	-116.032072	3,985	-599	Safety Experiment	Less than 20 kt	1031
12:30:00.00	37.138372	-116.118258	4,486	500	Weapons Related	19 kt	113
21:00:00.16	37.129666	-116.057353	4,239	-493	Weapons Related	Low	273
20:00:00.00	28.733340	-126.266743	0	-2,000	Weapons Effects	30 kt	64
11:45:00.00	37.134742	-116.041648	4,230	500	Weapons Related	10 kt	90
15:00:00.04	37.009391	-116.043169	3,977	-789	Weapons Related	Less than 20 kt	588
19:30:00.04	37.209080	-116.226276	7,514	-1,700	Weapons Related	20 to 200 kt	583

U.S. Nuclear Detonations - By Name

Test	Detonation	Date (mm/dd/yyyy) (GMT)	Sponsor	Location	Hole	Type
402	Wishbone ☹	02/18/1965	LLNL/DoD	NNSS	U5a	Shaft
284	Wolverine	10/12/1962	LANL	NNSS	U3av	Shaft
397	Wool ☹	01/14/1965	LLNL	NNSS	U9bh	Shaft
521	Worth	10/25/1967	LLNL	NNSS	U10ag	Shaft
179	Wrangell	10/22/1958	LLNL	NNSS	Area 5	Balloon
4	X-Ray	04/15/1948	LANL	Enewetak Atoll	----	Tower
48	Yankee	05/04/1954	LANL	Bikini Atoll	----	Barge
635	Yannigan-Blue ☹	02/26/1970	LLNL	NNSS	U2ay #3	Shaft
635	Yannigan-Red ☹	02/26/1970	LLNL	NNSS	U2ay #1	Shaft
635	Yannigan-White ☹	02/26/1970	LLNL	NNSS	U2ay #2	Shaft
514	Yard ☹	09/07/1967	LLNL	NNSS	U10af	Shaft
128	Yellowwood	05/26/1958	LANL	Enewetak Atoll	----	Barge
690	Yerba ☹	12/14/1971	LANL	NNSS	U1c	Shaft
251	Yeso	06/10/1962	LANL	Christmas Island area	----	Airdrop
5	Yoke	05/01/1948	LANL	Enewetak Atoll	----	Tower
274	York ☹	08/24/1962	LLNL	NNSS	U9z	Shaft
326	Yuba	06/05/1963	LLNL	NNSS	U12b.10	Tunnel
120	Yucca	04/28/1958	LANL/DoD	Pacific	----	Balloon
234	Yukon	05/08/1962	LLNL	Christmas Island area	----	Airdrop
72	Yuma	05/27/1956	LLNL	Enewetak Atoll	----	Tower
517	Zaza ☹	09/27/1967	LANL	NNSS	U4c	Shaft
6	Zebra	05/15/1948	LANL	Enewetak Atoll	----	Tower
700	Zinnia ☹	05/17/1972	LLNL	NNSS	U2dk	Shaft
63	Zucchini	05/15/1955	LANL	NNSS	Area 7	Tower
71	Zuni	05/27/1956	LLNL	Bikini Atoll	----	Surface

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Time (GMT)	Latitude (degrees)	Longitude (degrees)	Surface Elevation (ft)	Height of Burst or Depth of Burial (ft)	Purpose	Yield Range	Test
16:18:47.15	36.817963	-115.950093	3,086	-574	Weapons Effects	Less than 20 kt	402
17:00:00.12	37.048734	-116.033427	4,027	-241	Weapons Related	Low	284
16:00:00.14	37.118976	-116.025639	4,310	-709	Weapons Related	Less than 20 kt	397
14:45:00.08	37.156291	-116.049466	4,251	-646	Weapons Related	Less than 20 kt	521
16:50:00.00	36.797923	-115.929776	3,077	1,500	Weapons Related	115 tons	179
18:17:00.00	11.665300	162.234000	0	200	Weapons Related	37 kt	4
18:10:00.00	11.679000	165.391500	0	7	Weapons Related	13.5 Mt	48
15:30:00.04	37.113755	-116.066669	4,214	-1,193	Weapons Related	20 to 200 kt	635
15:30:00.04	37.116315	-116.062313	4,214	-1,286	Weapons Related	20 to 200 kt	635
15:30:00.04	37.118002	-116.067318	4,227	-1,295	Weapons Related	20 to 200 kt	635
13:45:00.00	37.153110	-116.053654	4,257	-1,708	Weapons Related	20 to 200 kt	514
02:00:00.00	11.659775	162.223408	0	11	Weapons Related	330 kt	128
21:10:01.04	37.023210	-116.059499	4,031	-1,089	Weapons Related	Less than 20 kt	690
16:01:00.00	1.380000	-157.195000	0	8,325	Weapons Related	3 Mt	251
18:09:00.00	11.619410	162.313825	0	200	Weapons Related	49 kt	5
15:00:00.15	37.118588	-116.040353	4,208	-743	Weapons Related	Low	274
17:00:00.12	37.196527	-116.210043	7,438	-796	Weapons Related	3.1 kt	326
02:40:00.00	12.616667	163.016667	0	86,000	Weapons Effects	1.7 kt	120
18:01:00.00	1.565000	-157.365000	0	2,880	Weapons Related	100 kt	234
19:56:00.00	11.618730	162.314125	10	205	Weapons Related	190 tons	72
17:00:00.04	37.098718	-116.054096	4,158	-2,188	Weapons Related	20 to 200 kt	517
18:04:00.00	11.551450	162.348100	10	200	Weapons Related	18 kt	6
14:10:00.16	37.120509	-116.088767	4,279	-1,059	Weapons Related	Less than 20 kt	700
12:00:00.00	37.094780	-116.024575	4,245	500	Weapons Related	28 kt	63
17:56:00.00	11.503166	165.370537	9	0	Weapons Related	3.5 Mt	71

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Abbreviations and Acronyms

AEC	Atomic Energy Commission
AFSWP	Armed Forces Special Weapons Project
ASROC	Antisubmarine Rocket
CY	Calendar Year
DASA	Defense Atomic Support Agency
DNA	Defense Nuclear Agency
DoD	U.S. Department of Defense
DOE	U.S. Department of Energy
DOE/NV	U.S. Department of Energy, Nevada Operations Office
DSWA	Defense Special Weapons Agency
DTRA	Defense Threat Reduction Agency
ERDA	Energy Research and Development Administration
ESS	Effects SubSurface
ft	foot
GMT	Greenwich Mean Time
HA	High Altitude
JVE	Joint Verification Experiment
kt	kiloton
LANL	Los Alamos National Laboratory
LASL	Los Alamos Scientific Laboratory
LLL	Lawrence Livermore Laboratory
LLNL	Lawrence Livermore National Laboratory
LRL	Lawrence Radiation Laboratory
MET	Military Effects Tests
mm	millimeter
Mt	megaton
NAFR	Nellis Air Force Range
NNSS	Nevada National Security Site

NTS	Nevada Test Site
NTTR	Nevada Test and Training Range
RL	Radiation Laboratory
TNT	trinitrotoluene
UK	United Kingdom
US/U.S.	United States

Glossary

Airburst	A type of atmospheric test in which the explosion of a nuclear weapon occurred at such a height that the expanding fireball did not touch the earth's surface before the fireball reached its maximum luminosity. The airburst reported in this document (<i>Grable</i> , test #42) resulted from the detonation of an MK9 device fired from a 280mm gun.
Airdrop	A type of atmospheric test in which a nuclear device was dropped from an aircraft and exploded in the atmosphere.
Atmospheric	A test conducted above ground or above water (i.e., in the open air).
Balloon	A type of atmospheric test in which a nuclear device was suspended from a balloon and exploded in the atmosphere.
Barge	A type of atmospheric test in which a nuclear device exploded on a barge moored in the lagoon at Enewetak Atoll or Bikini Atoll.
Cementback	Operation whereby the drill hole was sealed with a plug and cemented to the surface.
Controlled release	A planned, filtered release frequently performed to reduce airborne radiation levels in the working environment.
Crater	A type of underground test in which a surface depression was formed by the detonation of a nuclear device placed shallow enough underground to produce a throw-out of earth when exploded. (Also see <i>subsidence crater</i> .)
Detonation	A single nuclear device explosion; one or more comprised a test.
Drillback	Directional drilling operation, performed after test activities were ceased, to sample fission product materials in the test cavity. While nearly all later tests had directional drilling, some early tests had vertical sample drilling from the crater floor.
Gas sampling	Operation, usually performed after test activities were ceased, to determine levels of noble gases present. Some prompt gas-sampling activities were conducted very soon after the detonation (mostly LLNL sampling).
Hole	The location of a nuclear weapon test/detonation conducted at the NNSS. The uppercase alpha designator refers to the type of location (i.e., S = surface, U = underground). The numeric designator refers to the geographical area of the NNSS. The remaining letters generally were sequential but could also represent subareas (e.g., U10ca, U10cb). In the case of most atmospheric tests, only the geographical area of the NNSS is given.
Joint US-UK	A nuclear test conducted jointly by the United States and the United Kingdom under a cooperative agreement that has remained in effect between the two countries since August 4, 1958.

Kiloton	The energy of a nuclear explosion that is equivalent to the explosive power of 1,000 tons of TNT.
Megaton	The energy of a nuclear explosion that is equivalent to the explosive power of 1 million tons of TNT.
Mudpit release	A breach of a pit used to contain radioactively contaminated mud generated from post-shot drillback operations.
Nellis Air Force Range	Former name of the Nevada Test and Training Range.
Nevada National Security Site	An area of land established as the Atomic Energy Commission's on-continent proving ground in 1950. The NNSS is located 65 miles northwest of Las Vegas in Nye County and covers an area of approximately 1,360 square miles.
Nevada Test and Training Range	An area of land that surrounds the east, north, and most of the west boundary of the NNSS. The NTTR is controlled by the U.S. Air Force and covers more than 4,500 square miles.
Nevada Test Site	Former name of the Nevada National Security Site.
Offsite	Any place outside the Test Range Complex or an area withdrawn/secured for a nuclear test within the continental boundaries of the United States.
Onsite	A notation that <i>radioactivity was detected onsite only</i> is made for any test from which there was a release of radioactivity into the atmosphere that was not detectable beyond the boundaries of the Test Range Complex or Offsite location.
Plowshare	A test in the Plowshare Program intended to explore the application of nuclear explosives to peaceful uses. Potential uses included excavating (various applications), producing isotopes, and fracturing tight geologic formations (enhanced oil and gas extraction).
Retarc	<i>Sulky</i> , test #396, was intended to form a throw-out crater, but at the depth of burial used, the stronger-than-expected rock medium confined the explosive energy of the detonation so that only a mound of broken rock was formed. This was dubbed a "retarc" ("crater" spelled backward).
Rocket	A type of atmospheric test in which a nuclear device was launched by rocket and exploded in the atmosphere.
Roman Candle	A test conducted underground in an unstemmed hole to minimize, but not eliminate, the release of radioactivity to the atmosphere. Because radiation-induced fluorescence was seen as a beam of light, this was sometimes referred to as a "Roman candle" effect.
Safety Experiment	An experiment designed to confirm that a nuclear explosion would not occur in case of an accidental detonation of the chemical explosive associated with the device.

Seismic Calibration	A test conducted to evaluate seismic effects of an underground explosion.
Shaft	A type of underground test in which a nuclear device exploded at the bottom of a drilled or mined vertical hole. Some safety tests were set off at the bottom of unstemmed drilled holes.
Simultaneous	Two or more underground nuclear explosions (detonations) conducted within an area delineated by a circle having a diameter of 2 kilometers (1.24 miles) and conducted within a total period of time that did not exceed 0.1 second.
Site	The land area withdrawn for U.S. government testing purposes (e.g., NNSS, NTTR, Project Shoal) or the area secured to ensure no inadvertent public intrusion (e.g., Amchitka Island and Rulison test vicinity). Almost all nuclear tests were conducted within an area withdrawn from public domain; however, this was not true for Amchitka and Rulison underground nuclear tests, where no formal land withdrawal was recorded.
Sponsor	The organization(s) (i.e., national weapons laboratory or laboratories, the U.S. Department of Defense, and/or the United Kingdom) responsible for conducting a particular nuclear test/detonation.
Storage-Transportation	Detonations of combinations of high explosives and nuclear materials designed to study distribution of nuclear materials following accidents in several transportation and storage configurations. There was no nuclear yield.
Subsidence crater	<p>A depression that may form at the ground surface following an underground detonation. At the end of the dynamic phase of cavity growth, a pressurized standing cavity is present. As the cavity pressure and temperature decrease, the roof of the cavity becomes unstable and falls into the cavity. The top of the so-called "chimney," now formed above the cavity, continues to fall into the void. A phenomenon known as "bulking" results in the fallen material having decreased density from its normal state, hence increased volume. If the bulking fills the chimney, collapse stops without reaching the surface. Such a subsurface collapse can also be caused by the chimney's intercepting a high-strength geologic structure. When the chimney reached the surface, a subsidence crater was formed. The size of the subsidence crater depends on the yield of the device, the depth of emplacement, and the geological characteristics of the surrounding soil.</p> <p>A throw-out crater (see <i>crater</i>) is formed by a totally different mechanism than a subsidence crater.</p>
Surface	A type of atmospheric test in which a nuclear device was placed on or close to the earth's surface, but no more than 10 ft off the ground.
Surface elevation	The vertical distance from mean sea level to a point on the earth's surface; generally refers to the surface ground zero of a nuclear device test/detonation.
Test	Defined in the Threshold Test Ban Treaty as either a single underground nuclear explosion conducted at a test site, or two or more underground nuclear explosions conducted within an area delineated by a circle having a diameter of 2 kilometers and conducted within a total period of time that did not exceed 0.1 second.

Test Range Complex	An area that includes both the NNSS and the adjacent U.S. Air Force-controlled NTTR.
Thermonuclear device	Commonly referred to as a "hydrogen bomb," part of the explosion energy from this device resulted from the fusion of light nuclei such as those of hydrogen isotopes.
Ton	The energy of a nuclear explosion that is equivalent to the explosive power of 1 ton of TNT. (The yield of a nuclear device is a measure of the amount of energy released when it explodes. It is stated in terms of the quantity of TNT that would produce the same amount of explosive energy.) By definition, 1 ton is equivalent to 10^9 (E9) calories.
Tower	A type of atmospheric test in which a nuclear device was mounted near the top of a steel or wooden tower and exploded in the atmosphere 10 ft or more above the ground.
Tunnel	A type of underground test in which a nuclear device exploded within a horizontal drift mined into a mountain or mesa in a way that placed the burst point deep within the earth.
Underground	A test in which a nuclear device exploded in a tunnel, or near the bottom of a drilled or mined hole or shaft. Some underground nuclear tests were not designed to contain all radioactivity (e.g., cratering tests or safety experiments).
Underwater	A test in which a nuclear device was detonated underwater.
Vela Uniform	A U.S. Department of Defense program designed to improve the capability to detect, identify, and locate underground nuclear explosions.
Verification Experiment	A test on which the former Soviet Union exercised its right to verify under the terms of the Threshold Test Ban Treaty.
Weapons Effects	A type of atmospheric test conducted to evaluate the civil or military effects of a nuclear detonation on various targets, such as military hardware.
Weapons Related	A type of atmospheric test conducted for the purpose of testing a nuclear device intended for a specific type of weapon system.
Yield	The total effective energy released in a nuclear explosion. It is usually expressed in terms of equivalent tonnage of TNT required to produce the same energy release in an explosion.

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